

**Draft**

**Western Nevada County**

**8-Hour Ozone**

**Regional Emissions Analysis for the  
Dorsey Drive Interchange and  
Squirrel Creek Bridge Projects**

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## EXECUTIVE SUMMARY

### *Background*

Western Nevada County is designated as an isolated rural non-attainment area, under the classification of subpart 1 (basic), for the 8-hour ozone National Ambient Air Quality Standards (NAAQS), effective June 15, 2004. Isolated rural non-attainment areas are required to demonstrate air quality conformity when federal approval is required on a regionally significant non-exempt transportation project. A regional emission analysis must show that the project, in addition to the other regionally significant federal and non-federal transportation projects, do not create new violations of the NAAQS, increase the severity of NAAQS, or delay timely attainment.

Ozone is a secondary pollutant generated by chemical reactions in the atmosphere involving reactive organic gases (ROG) and Nitrogen Oxides (NOx). Ozone is unhealthy to breathe, especially for people with respiratory illnesses and for children and adults who are active outdoors. The U.S. Environmental Protection Agency's (EPA) non-attainment designation of western Nevada County with the classification of subpart 1 (basic) was in recognition of the fact that the cause of ozone violations of the 8-hour NAAQS occur primarily from the transport of pollutants generated in the Sacramento Valley and the San Francisco Bay area.

The first transportation projects requiring an air quality conformity determination in relation to 8-hour ozone NAAQS are the Dorsey Drive Interchange project and the Squirrel Creek Bridge project. Caltrans District 3 and the Nevada County Transportation Commission (NCTC) are the Lead Agencies for the associated air quality planning and regional emissions analyses for the Dorsey Drive Interchange project and Squirrel Creek Bridge project.

The California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), in cooperation with the Nevada County Transportation Commission (NCTC), and the City of Grass Valley propose to convert the Dorsey Drive Over-crossing to a tight diamond interchange and connect it with State Route (SR) 20/49. This report presents the Dorsey Drive Interchange Conformity Analysis for Federal approval of the Dorsey Drive Interchange project located at approximately KP R21.9 (PM R13.6) adjacent to SR 20/49 within the City of Grass Valley.

The County of Nevada proposes to replace an existing 20 foot long one lane bridge/box culvert over Squirrel Creek located on Valley Drive with a two-lane 40 foot structure to alleviate roadway flooding, enhance roadway safety, and to accommodate emergency vehicles. The project is not located on a regionally significant roadway and the roadway approaches will remain two lanes. Due to the fact that this bridge project proposes to add an additional travel lane it requires a conformity determination. This project will be completed and open to traffic in 2008.

The regional emissions analysis contained herein demonstrate that the criteria specified in the Federal Transportation Conformity Rule have been met.

Summarized below are the applicable Federal criteria or requirements for a conformity determination, the conformity tests applied, and an overview of the organization of this report.

### *Conformity Requirements*

Section 93.109(d) of the Conformity Rule addresses regional conformity tests in 8-hour ozone areas that do not have 1-hour ozone State Implementation Plans (SIPs). The Conformity Rule indicates that “basic” 8-hour ozone areas without adequate or approved budgets must use either the no greater than 2002 baseline year test or action/baseline test for 8-hour conformity. Passing either of these two tests fulfills the regional emissions analysis requirements for the 8-hour ozone standard when an 8-hour budget is not yet established.

The Western Nevada County Non-Attainment Area, as an isolated rural area, is not required to maintain conformity with a Metropolitan Transportation Plan and Transportation Improvement Program (TIP), and whose projects are not part of the emission analysis of any Metropolitan Planning Organizations (MPOs) metropolitan transportation plan or TIP Section 93.109(1).

In accordance with the conformity rule, the interagency consultation process is being used for conducting regional emissions analyses and demonstrating conformity for the 8-hour ozone standard. An interagency coordination process outlining the responsibilities of the multiple agencies involved was developed to ensure the coordination of transportation planning and air quality conformity efforts and compliance with Federal and State Clean Air Act requirements. Through this process the Western Nevada County Conformity Working Group was established. This group is made up of representatives from the NCTC, the Northern Sierra Air Quality Management District (NSAQMD), Caltrans, the California Air Resources Board (CARB), EPA, FHWA, and the Federal Transit Administration (FTA).

After reviewing the submitted regional emissions analysis for compliance with the Conformity requirements, the decision on the final determination of conformity is the responsibility of the FHWA and FTA.

### *Federal Conformity Requirements*

The Federal Transportation Conformity Rule (40 Code of Federal Regulations (CFR) Parts 51 and 93) specifies the criteria and procedures for conformity determinations for transportation plans, programs, and projects and their respective amendments. The Federal Transportation Conformity Rules was first promulgated in 1993 by the EPA, following passage of amendments to the Federal Clean Air Act in 1990. The Federal Transportation Conformity Rule has been revised several times since its initial release to reflect both EPA rule changes and court opinions.

The Conformity Rule applies nationwide to “all non-attainment and maintenance areas for transportation-related criteria pollutants for which the area is designated non-attainment or has a maintenance plan” (40 CFR 93.102). Currently, western Nevada County is designated as a non-attainment area with respect to the Federal air quality standards for only one criteria pollutant: 8-hour ozone.

Under the Federal Transportation Conformity Rule, the principal criteria for a determination of conformity for a regionally significant project subject to conformity are as follows:

- ◆ Employment of the latest planning assumptions and emission models specified for use in conformity determinations
- ◆ Regional emissions test
- ◆ Interagency consultation
- ◆ Meet criteria found in 40 CFR Part 93

Consultation generally occurs: at the beginning of the conformity analysis process; on the proposed models; associated methods and assumptions for the upcoming analysis and the project to be assessed; and at the end of the process on the draft Conformity Analysis report.

To ensure complete documentation under the Federal Transportation Conformity Rule, FHWA has developed a Conformity Checklist (Appendix "A").

### *Conformity Tests*

Under the existing Conformity Rule, regional emissions analyses for ozone areas must address the reactive organic gases (ROG) and nitrogen oxides (NOx), which are both ozone precursors.

The conformity tests specified in the Federal Transportation Conformity Rule, basic non-attainment areas without 8-hour ozone budgets or previous 1-hour budgets can use either the no greater than 2002 baseline year test or action/baseline test (40 CFR 93.109 (d)). The test method that was used was the action/baseline test. This test demonstrates that for each analysis year modeled that the ozone precursor emissions associated with the transportation project(s) are not greater than the analysis year baseline emissions.

### *Conformity Analysis Results*

A regional emissions analysis was conducted for analysis years 2008, 2018, and 2027 for the pollutant ozone and the precursors ROG and NOx. All analyses were conducted using the latest planning assumptions and emissions models. For the action/baseline test, the Dorsey Drive Interchange project is assumed in the 2018 and 2027 test scenarios. Based on the planned phased construction of the Dorsey Drive Interchange, the 2018 test scenario assumes that only the southbound onramp to SR 20/49 is constructed and open to traffic. The 2027 test scenario assumes the entire Dorsey Drive interchange will be constructed and open to traffic. The major conclusions of the Dorsey Drive Interchange Regional Emissions Analysis are:

*For ozone, the total ROG and NOx associated with implementation of the project for all years tested (2008, 2018, and 2027), passed the action/baseline test where the emissions in the action scenario were no greater than the baseline scenario.*

- ◆ An emissions budget has not been established; therefore the action/baseline test was conducted and passed for ozone in relation to the Dorsey Drive Interchange. The emissions analysis was performed using the latest planning assumptions and emission model.
- ◆ Since western Nevada County Interagency Consultation Procedures have not been approved by EPA, consultation has been conducted in accordance with Federal requirements, by following the Draft Interagency Consultation Procedures that have been developed this effort satisfies all the parties in the Western Nevada County Conformity Working Group.
- ◆ Consultation has been conducted in accordance with Federal requirements.

After reviewing the scope and location of the **Squirrel Creek Bridge Project** at Valley Drive, the Western Nevada County Conformity Working Group made the determination that the project is not located on a regionally significant roadway and therefore per 40 CFR 122(a)(1) this project is not required to be explicitly modeled and the vehicle miles traveled (VMT) from the project have been estimated in accordance with reasonable professional practice. Per 40 CFR 93.119(g)(2), the transportation projects and planning assumptions in the "Action" and "Baseline" scenarios are exactly the same for all possible analysis years, and consequently, the

emissions predicted in the "Action" scenario are not greater than the emissions predicted in the "Baseline" scenario. Therefore, this project satisfies the conformity rule requirements without additional regional emissions analysis.

### ***Report Organization***

**Executive Summary** provides an overview of the information presented in the conformity analysis.

**Chapter I** describes the non-attainment status of western Nevada County, associated project descriptions, applicable Federal and State Conformity Rules and requirements, air quality implementation plans, and conformity test requirements.

**Chapter II** contains a discussion of the latest planning assumptions, including a summary of the transportation model characteristics, key socio-economic data, and other data related to the land use and transportation systems forecasts.

**Chapter III** describes the air quality modeling used to estimate emission factors and mobile source emissions, and summarizes the regional emissions test results.

**Chapter IV** provides an overview of the interagency requirements and compliance.

**Appendices** include consultation documentation and other related information.

## CHAPTER 1

### *CONFORMITY REQUIREMENTS*

#### **Non-Attainment Designation**

On June 15, 2004, western Nevada County was designated as an isolated rural non-attainment area, under the classification of subpart 1 (basic), for the 8-hour ozone National Ambient Air Quality Standards (NAAQS). The Western Nevada County Non-Attainment Area is identified as the portion of Nevada County, which lies west of a line, described as follows: beginning at the Nevada/Placer County boundary and running north along the western boundaries of Sections 24, 13, 12, 1, Township 17 North, Range 14 East, Mount Diablo Base and Meridian, and Sections 36, 25, 24, 13, 12, Township 18 North, Range 14 East to the Nevada/Sierra County boundary. Western Nevada County is attainment/unclassified for carbon monoxide (CO), particulate matter of 10 microns or smaller (PM<sub>10</sub>) and particulate matter of 2.5 microns or smaller (PM<sub>2.5</sub>).

Isolated rural non-attainment areas are required to demonstrate air quality conformity when a federal approval is required on a regionally significant non-exempt transportation project. The conformity analysis must show that the project, in addition to the other regionally significant federal and non-federal transportation projects, do not create new violations of the NAAQS, increase the severity of NAAQS, or delay timely attainment.

Caltrans District 3 and the Nevada County Transportation Commission (NCTC) are the Lead Agencies for the associated air quality planning and regional emissions analyses for the Dorsey Drive Interchange project and Squirrel Creek Bridge project.

#### ***Ozone***

Ozone is a secondary pollutant generated by chemical reactions in the atmosphere involving reactive organic gases (ROG) and Nitrogen Oxides (NO<sub>x</sub>). Ozone is unhealthy to breathe, especially for people with respiratory illnesses and for children and adults who are active outdoors. The U.S. Environmental Protection Agency's (EPA) non-attainment designation of western Nevada County with the classification of subpart 1 (basic) was in recognition of the fact that the cause of ozone violations of the 8-hour NAAQS occur primarily from the transport of pollutants generated in the Sacramento Valley and the San Francisco Bay area.

The first transportation projects requiring an air quality conformity determination in relation to 8-hour ozone NAAQS are the Dorsey Drive Interchange project and the Squirrel Creek Bridge project. Through interagency consultation it was determined that these projects will not cause or contribute to any new localized PM or CO violations.

#### ***Dorsey Drive Interchange Project***

The California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA), in cooperation with the Nevada County Transportation Commission (NCTC), and the City of Grass Valley propose to convert the Dorsey Drive Over-crossing to a tight diamond interchange and connect it with State Route (SR) 20/49. This report presents the Dorsey Drive Interchange Conformity Analysis for Federal approval of the Dorsey Drive Interchange project located at approximately KP R21.9 (PM R13.6) adjacent to SR 20/49 within the City of Grass Valley.

### *Squirrel Creek Bridge Project*

The County of Nevada proposes to replace an existing 20 foot long one lane bridge/box culvert located on Valley Drive with a two-lane 40 foot structure to alleviate roadway flooding, enhance roadway safety, and to accommodate emergency vehicles. The project is not located on a regionally significant roadway and the roadway approaches will remain two lanes. Due to the fact that this bridge project proposes to add an additional travel lane it requires a conformity determination. This project will be completed and open to traffic in 2008.

The County of Nevada's Highway Bridge Rehabilitation and Replacement Program (HPRRP) projects were reviewed in relation to air quality conformity as part of the March 20, 2006 Western Nevada County Conformity Working Group meeting.

After reviewing the scope and location of the Squirrel Creek Bridge Project at Valley Drive, the Western Nevada County Conformity Working Group made the determination that the project is not located on a regionally significant roadway and therefore per 40 CFR 122(a)(1) this project is not required to be explicitly modeled and the vehicle miles traveled (VMT) from the project have been estimated in accordance with reasonable professional practice. Per 40 CFR 93.119(g)(2), the transportation projects and planning assumptions in the "Action" and "Baseline" scenarios are exactly the same for all possible analysis years, and consequently, the emissions predicted in the "Action" scenario are not greater than the emissions predicted in the "Baseline" scenario for such analysis years. Therefore, this project satisfies the conformity rule requirements without additional regional emissions analysis.

### *Federal Conformity Rule*

The U.S. Environmental Protection Agency (EPA) issued a Final Rule on July 1, 2004, that amended the Transportation Conformity Rule to include criteria and procedures for the new 8-hour ozone standard. The EPA's non-attainment area designations for the new 8-hour ozone standard became effective on June 15, 2004, for most areas. Conformity for a given pollutant and standard applies one (1) year after the effective date of EPA's initial non-attainment designation. Therefore, conformity for the 8-hour ozone standard will begin to apply on June 15, 2005.

In accordance with the Conformity Rule, an ongoing interagency consultation process is being used for conducting regional emissions analyses and demonstrating conformity for the 8-hour ozone standard. The documentation contained in this analysis demonstrates that the criteria specified in the federal transportation conformity rule for a conformity determination are satisfied for the Dorsey Drive Interchange and Squirrel Creek Bridge project.

### *Conformity Rule Requirements*

Section 93.109(l) of the Conformity Rule addresses regional conformity tests in isolated rural non-attainment and maintenance areas. As included in that section, the following provisions of the Transportation Conformity Rule apply to the Dorsey Drive Interchange Regional Emissions Analysis: latest planning assumptions (93.110), latest emissions model (93.111) and consultation (93.112). Additionally, the Dorsey Drive Interchange Project is subject to the interim emissions test since the area was never designated non-attainment for the 1-hour ozone NAAQS and there is no currently approved or adequate mobile source emissions budget for the 8-hour ozone standard. While the Transportation Conformity Rule identifies a number of other requirements for conformity determinations in rural non-attainment areas, they are not applicable for this conformity determination. First, there is no applicable State Implementation Plan (SIP) with

transportation control measures (TCMs). Therefore, the timely implementation of TCMs is not applicable. The other requirements (93.116 and 93.117) apply only in PM10, PM2.5 and CO non-attainment and maintenance areas.

### ***Conformity Test Requirements***

Under the existing Conformity Rule, regional emissions analyses for ozone areas must address ROG and NOx precursors. The test used can be either the no greater than 2002 baseline year test or action/baseline test for 8-hour conformity when 8-hour ozone emission budgets are not available. Areas will need to determine the modeling analysis years that apply for the 8-hour standard. The requirements for the analysis year are included in 40 CFR 93.119(g). The first analysis year must be no more than five (5) years from the year the conformity determination is being made. Since the attainment year is within the first five (5) years, once the transportation modeling is complete, the 8-hour ozone non-attainment area will have models completed so that the attainment demonstration SIP budget for the isolated rural non-attainment area can be established. Additional analysis years include the last year of the transportation plan's forecast period and any year such that the analysis years are no more than ten (10) years apart. The area must then calculate emissions for the analysis years for both the existing and planned transportation system. The last year of the *2005 Nevada County Regional Transportation Plan* forecast period is 2027.

The motor vehicle emissions budgets for ROG and NOx in tons per average summer day were not available at the time this regional emissions analysis was prepared and the interim action/baseline test was utilized. By June 15, 2007, the emission budgets will be developed by the Northern Sierra Air Quality Management District (NSAQMD) in coordination with NCTC as part of the development of the 8-Hour Ozone Attainment Demonstration SIP for Western Nevada County Plan.

**Table 1**  
**Conformity Test Utilized by Pollutant and Precursor**

	Interim Emissions Test Applied	Budget Test Applied
Pollutant: Ozone	X	
Precursor: Nitrogen Oxides (NOx)	X	
Precursor: Reactive Organic Gases (ROG)	X	

### ***Conformity Analysis Years***

The analysis years to be used in the conformity analysis were reviewed and accepted by the Western Nevada County Conformity Working Group as part of the interagency consultation process. In compliance with the conformity test requirements the analysis years selected for interim action/baseline regional emissions tests were: 2008, 2018 and 2027.

## CHAPTER 2

### *LATEST PLANNING ASSUMPTIONS*

The Final Rule adopted on July 1, 2004, allows conformity determinations to be based on the latest planning assumptions that are available at the time the Conformity Analysis begins. The interagency consultation process should be used to determine the time the Conformity Analysis begins.

In accordance with the conformity rule, the interagency consultation process is being used for conducting regional emissions analyses and demonstrating conformity for the 8-hour ozone standard. Through this process the Western Nevada County Conformity Working Group was established. This group is made up of representatives from the NCTC, the Northern Sierra Air Quality Management District (NSAQMD), Caltrans, the California Air Resources Board (CARB), EPA, FHWA, and the Federal Transit Administration (FTA). The interagency consultation meeting held on June 16, 2005 marked the beginning of the development of the Dorsey Driver Interchange Conformity Analysis. On March 20, 2006, the Western Nevada County Conformity Working Group met and approved the use of the interim emissions test, analyses years, NCTC model assumptions, listed regionally significant projects, projects exempt under 40 CFR 93.126 and 93.127, and the general emissions modeling methodology.

This Dorsey Driver Interchange Regional Emissions Analysis is financially constrained and consistent with the design, concept, and scope of the associated environmental document.

The latest adopted planning assumptions available at the time the conformity analysis was started were utilized by the NCTC and Caltrans in developing the Dorsey Drive Interchange Regional Emissions Analysis. The NCTC traffic model and associated planning assumptions for western Nevada County were updated and approved in 2003. PRISM Engineering completed traffic model runs for the analysis years 2008, 2018, and 2027 and submitted them to Caltrans District 3 on May 10, 2006.

#### *Traffic Modeling*

The Nevada County Transportation Commission's (NCTC) adopted traffic model for western Nevada County was developed using the software application Viper/TP+ and calibrated and validated in 2003. The base year for the model is 2002 and the horizon year is 2027. Significant roadways identified to be outside the model coverage area, but within the Western Nevada County Non-Attainment boundary were analyzed offline to determine the associated VMT for the regional emission analysis scenarios.

2000 Census Journey-to-Work Mode Split indicate that transit mode share is less than 1% of the total home based work trips. Given the relatively low population centers and rural character of the county, transit mode share is not expected to increase significantly by 2027, the horizon year of the Regional Transportation Plan and this analysis. There is no transit component in the NCTC travel demand model. Therefore, while there are air quality benefits from transit service and they can be expected to increase, they are not quantified as part of this analysis.

### *Offline Vehicle Miles Traveled Analysis*

Through interagency consultation it was determined that an offline analysis would be required for the following major roadways outside of the NCTC travel demand model coverage area, but still within the Western Nevada County Non-Attainment Area:

- ◆ Bowman Lake Road
- ◆ SR 20 from just east of Bowman Lake Road to the connection with Interstate 80
- ◆ Interstate 80 east of the connection with State Route 20 to just east of Lake Van Norden

To determine the offline vehicle miles traveled (VMT) for each specific segment of roadway, the number of miles of the segment was multiplied by the most recent daily traffic volumes and then growth factors based on historic trends were utilized to determine the VMT for the analysis years 2008, 2018, 2027. Once the VMT was determined it was added to the model output VMT by speed bin.

### *Highway Networks*

Networks needed to meet the requirements for the Conformity Analysis are for the years 2008, 2018, and 2027. Appendix "B" contains a list of the financially constrained federal and non-federal regional projects used to develop the build transportation networks for 2008, 2018, and 2027 utilized in the Dorsey Drive Interchange Regional Emissions Analysis.

The 2008 action scenario includes the federal and non-federal regional projects that will be constructed by 2008. The 2018 action scenario includes the federal and non-federal regional projects and a southbound on-ramp constructed for the Dorsey Driver Interchange. The 2027 action scenario includes the federal and non-federal regional projects and the complete tight-diamond Dorsey Drive Interchange.

### *Population and Employment Projections*

In accordance with Section 93.110 of the Federal Conformity Rule, the latest estimates of population and employment projections utilized by the NCTC for western Nevada County Conformity Analysis are shown in the table below.

**Table 2**  
**Comparison of Socio-Economic and Vehicle Miles Traveled by Model Horizon Years**

Analysis Year	*Western Nevada Co. Pop. (Thousands)	*Western Nevada Co. Employment (Thousands)	Daily VMT (No Build)	Daily VMT (Build)
2008	87.19	25.90	5,131,690	5,125,134
2018	101.86	31.87	5,872,389	5,896,667
2027	114.05	37.77	6,465,961	6,480,172

Caltrans Socio-Economic Forecasts for Nevada County 2005-2025. \*Population and Employment numbers represent 82% of the County total based on 2000 Census data for western Nevada County.

### *Air Quality Modeling*

In accordance with Section 93.111, the latest approved emission estimation model (EMFAC 2002) was used in the 8-hour conformity determinations. The vehicle registration data included in the EMFAC model was less than five years old at the time of the Conformity Analysis was begun.

EMFAC 2002 program requires information describing the distribution of the VMT and speeds by vehicle type. Control totals for VMT and the number of vehicle trips are from the NCTC travel demand model outputs, offline analysis, and EMFAC 2002. Current forecasted estimates of vehicle registrations, age distributions, and fleet mix are developed by CARB based upon vehicle population and registration distributions extracted from the California Department of Motor Vehicles. These data files utilized in the EMFAC 2002 program contain forecasts of vehicle fleet mix by vehicle type, whether the vehicles are equipped with catalytic converters, and whether the vehicle is fueled by diesel fuel or gasoline. These various inputs and distributions by vehicle engine type are used by EMFAC 2002 to determine emission estimates.

#### ***State Implementation Plan Measures***

There are no committed control measures as there is not an approved SIP for western Nevada County. Until there is an approved SIP, western Nevada County Non-Attainment Area will not have control measures. The western Nevada County 8-Hour Ozone Basic Attainment Demonstration Plan due date is June 15, 2007.

## CHAPTER 3

### AIR QUALITY MODELING

#### EMFAC 2002

The EMFAC 2002 emissions model was used to estimate the emissions for ozone precursors. The Conformity Rule requirements for the selection of the horizon years are summarized in Chapter 2. Consultation on the general air quality modeling methodology applied was conducted by the Western Nevada County Conformity Working Group on June 16, 2005 and March 20, 2006.

#### Summary of Procedures for Regional Emissions Estimates

Step-by step air quality modeling procedures, including instructions, references and controls for the Dorsey Drive Interchange Regional Emissions Analysis are available on the Fresno Council of Government website at [http://www.fresnocog.org/air-quality-modeling/mcc\\_aqcm.htm](http://www.fresnocog.org/air-quality-modeling/mcc_aqcm.htm). In addition, documentation of the Dorsey Drive Interchange Regional Emissions Analysis is provided in Appendix "C", including:

- ◆ VMT by Speed Bin
- ◆ EMFAC 2002 Action/Baseline Emission Outputs by Analysis Years

**Table 3**  
**EMFAC 2002 Action/Baseline Emission Test Results**

Analysis Years	OZONE PRECURSOR			
	NOx (tons per day)		ROG (tons per day)	
	Baseline	Action	Baseline	Action
2008	5.31	5.30	1.58	1.58
2018	2.09	2.09	0.59	0.59
2027	1.09	1.09	0.30	0.30

EMFAC 2002 (Summer Runs)

A regional emissions analysis was conducted for analysis years 2008, 2018, and 2027 for the pollutant ozone and the precursors ROG and NOx. All analyses were conducted using the latest planning assumptions and emissions models. For the action/baseline test, the Dorsey Drive Interchange project is assumed in the 2018 and 2027 test scenarios. Based on the planned phased construction of the Dorsey Drive Interchange, the 2018 build test scenario assumes that only the southbound onramp to SR 20/49 is constructed and open to traffic. The 2027 build test scenario assumes the entire Dorsey Drive tight diamond interchange will be constructed and open to traffic. The major conclusions of the Dorsey Drive Interchange Regional Emissions Analysis are:

*For ozone, the total ROG and NOx associated with implementation of the project for all years tested (2008, 2018, and 2027), passed the action/baseline test where the emissions in the action scenario were no greater than the baseline scenario.*

- ◆ An emissions budget has not been established; therefore the action/baseline test was conducted and passed for ozone in relation to the Dorsey Drive Interchange. The emissions analysis was performed using the latest planning assumptions and emission model.
- ◆ Since western Nevada County Interagency Consultation Procedures have not been approved by EPA, consultation has been conducted in accordance with Federal requirements. By following the Draft Interagency Consultation Procedures that have been developed, this effort satisfies all the parties in the Western Nevada County Conformity Working Group.
- ◆ Consultation has been conducted in accordance with Federal requirements.

After reviewing the scope and location of the **Squirrel Creek Bridge Project** at Valley Drive, the Western Nevada County Conformity Working Group made the determination that the project is not located on a regionally significant roadway and therefore per 40 CFR 122(a)(1) this project is not required to be explicitly modeled and the vehicle miles traveled (VMT) from the project have been estimated in accordance with reasonable professional practice. Per 40 CFR 93.119(g)(2), the transportation projects and planning assumptions in the "Action" and "Baseline" scenarios are exactly the same for all possible analysis years, and consequently, the emissions predicted in the "Action" scenario are not greater than the emissions predicted in the "Baseline" scenario for such analysis years. Therefore, this project satisfies the conformity rule requirements without additional regional emissions analysis.

## CHAPTER 4

### *INTERAGENCY CONSULTATION*

The requirements for consultation procedures are listed in the Conformity Rule under Section 93.105. Consultation is necessary to ensure communication and coordination among air and transportation agencies at the local, State and Federal levels on issues that would affect the Conformity Analysis, such as the underlying assumptions and methodologies used to prepare the analysis. Section 93.105 of the Conformity Rule notes that there is a requirement to develop a conformity SIP that includes procedures for interagency consultation, resolution of conflicts and public consultation as described in paragraphs (a) through (e). Section 93.105(a)(2) states that prior to EPA approval of the conformity SIP, "MPOs and State departments of transportation must provide reasonable opportunity for consultation with State air agencies, local air quality and transportation agencies, DOT and EPA, including consultation on the issues described in paragraph (c)(1) of this section, before making conformity determinations."

A summary of the interagency consultation conducted to comply with these requirements is provided below. Interagency consultation on the Dorsey Drive Interchange Regional Emissions Analysis is documented in Appendix "D".

#### *Interagency Consultation*

Consultation is generally conducted through the Western Nevada County Conformity Working Group. This group is made up of representatives from the NCTC, the Northern Sierra Air Quality Management District (NSAQMD), Caltrans, the California Air Resources Board (CARB), EPA, FHWA, and the Federal Transit Administration (FTA). The Western Nevada County Conformity Working Group has been established by the Nevada County Transportation Commission to provide a coordinated approach to the western Nevada County air quality, conformity, and transportation related issues. The Working Group's goal is to ensure coordination, communication and compliance with Federal and State Clean Air Act requirements. The Western Nevada County Conformity Working Group meets as often as needed, but not less frequently than semi-annually unless there is consensus among the members to meet less frequently, but not less than annually.

An interagency consultation and coordination process outlining the responsibilities of the multiple agencies involved was developed to ensure the coordination of transportation planning and air quality conformity efforts and compliance with Federal and State Clean Air Act requirements. The interagency consultation meeting held on June 16, 2005 marked the beginning of the development of the Dorsey Driver Interchange Conformity Analysis. On March 20, 2006, the Western Nevada County Conformity Working Group met and approved the use of the interim emissions test, analyses years, NCTC model assumptions, listed regionally significant projects, projects exempt under 40 CFR 93.126 and 93.127, and the general emissions modeling methodology.

The *Draft Western Nevada County 8-Hour Ozone Regional Emissions Analysis for the Dorsey Drive Interchange and Squirrel Creek Bridge Projects* was distributed to the Western Nevada County Conformity Working Group in July 2006 for review. Comments received from the Working Group will be addressed and included in the Final Report. The draft document is also posted on the NCTC website at <http://www.nctc.ca.gov>.

## ***Public Consultation***

In general, agencies preparing a regional emissions analysis for the purpose of demonstrating conformity shall establish a proactive public involvement process that provides opportunity for public review and comment.

The *Draft Western Nevada County 8-Hour Ozone Regional Emissions Analysis for the Dorsey Drive Interchange and Squirrel Creek Bridge Projects* was circulated to the NCTC agenda packet mailing list and a public hearing was held by NCTC at their regularly scheduled meeting on July 19, 2006. A legal ad was placed in The Union newspaper providing notification of the public hearing to initiate the public comment period and that the draft document was available for review and comment at the Grass Valley Public Library, Madelyn Helling County Library, Nevada State Library and Archives, and the Nevada State Library and Archives. The minimum comment period requirement. Public consultation procedures from the *Draft Western Nevada County Interagency Consultation Procedures* has been excerpted and included in this document as follows:

### **Public Consultation Procedures**

- 6.1. NCTC and the Conformity Working Group will follow a public involvement process consistent with Federal planning and project approval requirements as applicable to isolated rural non-attainment areas. The preparation of a Regional Emissions Analysis will include a process to provide at a minimum a 30 day period for public review and comment.
- 6.2. Meetings of the Conformity Working Group are open to the public. Public notice of Conformity Working Group meetings will be posted at the site of the meeting, and will also be made available, at minimum, at the Nevada County Transportation Commission.
- 6.3. Additional public notice will be provided, based on normal local agency public information procedures, for meetings related to specific transportation projects.
- 6.4. Any charges imposed for public inspection and copying should be consistent with the adopted fee schedules per local agency procedures.
- 6.5. The project sponsor will respond, in writing, to all significant comments on a regional conformity analysis, whether by Conformity Working Group members, other agencies or the public.
- 6.6. Caltrans, or the regionally significant project sponsor, will specifically address, in writing, all public comments that known plans for a regionally significant project which is not receiving FHWA or FTA funding or approval have not been properly reflected in the emissions analysis supporting a proposed conformity finding. Decision as to who will respond will be decided through consensus of the Conformity Working Group.

## Conformity Analysis Documentation

### FHWA/EPA Checklist for Isolated Rural Nonattainment Areas

March 7, 2005

40 CFR	Criteria	Page	Comments
§93.102	Document the applicable pollutants and precursors for which EPA designates the area as nonattainment or maintenance. Describe the nonattainment or maintenance area and its boundaries.	5	
§93.104 (d)	Document whether a new conformity determination is required per this section: this is a new project; a significant change in design concept and scope; three years since the most recent step to advance the project; a supplemental EA/EIS was initiated for air quality purposes.	5,6	
§93.109 (a, b)	Document that the regional emissions analysis complies with any applicable conformity requirements of air quality implementation plans or court orders.	6,7	
§93.109 (l)	Provide a table that shows, for each pollutant and precursor, whether the interim emissions tests and/or the budget test apply for conformity. Indicate which emissions budgets have been deemed adequate and/or approved by EPA, and which budgets are currently applicable for what analysis years. Indicate what test is being used for analysis years after the attainment year (budget, interim, dispersion modeling) and if hot spot analyses are included.	5,7	There is not an approved SIP containing emission budgets. Hot spot analysis is not required.
§93.110 (a,b)	Document the use of latest planning assumptions (source and year) at the "time the conformity analysis begins," including current and future population, employment, travel and congestion. Document the use of the most recent available vehicle registration data. Document the date upon which the conformity analysis was begun.	8,9	EMFAC 2002
USDOT/EPA guidance	Document the use of planning assumptions less than five years old. If unable, include written justification for the use of older data. (1/18/02)	8	
§93.110 (c,d,e,f)	Document any changes in transit operating policies and assumed ridership levels since the previous conformity determination. Document the use of the latest transit fares and road and bridge tolls. Document the use of the latest information on the effectiveness of TCMs and other SIP measures that have been implemented. Document the key assumptions and show that they were agreed to through Interagency and public consultation.	5,6,8,10	There is not an approved SIP and effectiveness of TCMs etc. are not applicable.
§93.111	Document the use of the latest emissions model approved by EPA.	11	EMFAC 2002
§93.112	Document fulfillment of the interagency and public consultation requirements outlined in a specific implementation plan according to §51.390 or, if a SIP revision has not been completed, according to §93.105 and 23 CFR 450. Include documentation of consultation on conformity tests and methodologies as well as responses to written comments.	13	
§93.113 (a,d)	Document timely implementation of all TCMs in approved SIPs. Document that the project does not interfere with the implementation of TCMs.	6	Not Applicable
§93.116(a)	Document that the project does not cause or contribute to any new localized PM or CO violations.	5	Not Applicable
§93.116(b)	Document how the project contributes to eliminating or reducing the severity and number of localized CO violations.	5,6	Not Applicable
§93.117 <sup>3</sup>	Document that the project complies with any PM10 or PM2.5 control measures in the applicable attainment plan.	5,6	Not Applicable
§93.118 (a, c, e)	<u>For areas with SIP budgets:</u> Document that emissions from the transportation network, including projects in the isolated rural nonattainment area that are in the Statewide TIP and regionally significant non-Federal projects, are consistent with any adequate or approved motor vehicle emissions budget(s) for all pollutants and precursors in applicable SIP(s).	6,10	Not Applicable
§93.118 (b)	Document for which years consistency with motor vehicle emissions budgets must be shown.	6,10	Not Applicable
§93.118 (d)	Document the use of the appropriate analysis years in the regional emissions analysis for areas with SIP budgets, and the analysis results for these years. Document any interpolation performed to meet tests for years in which specific analysis is not required.	6,10	Not Applicable

40 CFR	Criteria	Page	Comments
§93.119 <sup>4</sup>	For areas without applicable SIP budgets: Document that emissions from the transportation network for each applicable pollutant and precursor, including projects in the isolated rural nonattainment area that are in the Statewide TIP and regionally significant non-Federal projects, are consistent with the requirements of the "Action/Baseline", "Action/1990" and/or "Action/2002" interim emissions tests as applicable.	3,10	See Table 3
§93.119 (g)	Document the use of the appropriate analysis years in the regional emissions analysis for areas without applicable SIP budgets.	7	
§93.119 (h,i)	Document how the baseline and action scenarios are defined for each analysis year.	9	Also see Appendix B-1
§93.122 (a)(1)	Document that all regionally significant Federal and non-Federal projects in the nonattainment/maintenance area are explicitly modeled in the regional emissions analysis. For each project, identify by which analysis year it will be open to traffic. Document that VMT for non-regionally significant Federal projects is accounted for in the regional emissions analysis.	B-1	Appendix B-1
§93.122 (a)(2, 3)	Document that only emission reduction credits from TCMs on schedule have been included, or that partial credit has been taken for partially implemented TCMs. Document that the regional emissions analysis only includes emissions credit for projects, programs, or activities that require regulatory action if: the regulatory action has been adopted; the project, program, activity or a written commitment is included in the SIP; EPA has approved an opt-in to the program, EPA has promulgated the program, or the Clean Air Act requires the program (indicate applicable date). Discuss the implementation status of these programs and the associated emissions credit for each analysis year.	6,10	Not Applicable
§93.122 (a)(4,5,6)	For nonregulatory measures that are not included in the STIP, include written commitments from appropriate agencies. Document that assumptions for measures outside the transportation system (e.g. fuels measures) are the same for baseline and action scenarios. Document that factors such as ambient temperature are consistent with those used in the SIP unless modified through interagency consultation.	6,10	Not Applicable
§93.122 (d)	Document the continued use of modeling techniques or the use of appropriate alternative techniques to estimate vehicle miles traveled.	8	Not Applicable
§93.122 (e, f)	Document, in areas where a SIP identifies construction-related PM10 or PM 2.5 as contributing, the inclusion of PM10 and/or PM 2.5 construction emissions in the conformity analysis.	5,6,10	Not Applicable
§93.123	Document how the required procedures were met for CO quantitative and qualitative and PM10 qualitative hot spot analyses.	5,6,10	Not Applicable
§93.126, §93.127, §93.128	Document all projects in the isolated rural nonattainment area that are in the Statewide TIP and exempt from conformity requirements or exempt from the regional emissions analysis. Indicate the reason for the exemption (Table 2, Table 3, signal synchronization) and that the interagency consultation process found these projects to have no potentially adverse emissions impacts.	D-3	Appendix D-3

<sup>1</sup> Applies for hot spot analyses in rural CO and PM10 nonattainment and maintenance areas only.

<sup>2</sup> Applies for hot spot analyses in rural CO nonattainment areas only.

<sup>3</sup> Applies for project-level conformity determinations in rural PM10 and PM2.5 nonattainment areas only.

<sup>4</sup> Note that some isolated rural areas are required to complete both interim emissions tests.

Disclaimers

This checklist is intended solely as an informational guideline to be used in reviewing Transportation Plans and Transportation Improvement Programs for adequacy of their conformity documentation. It is in no way intended to replace or supersede the Transportation Conformity regulations of 40 CFR Parts 51 and 93, the Statewide and Metropolitan Planning Regulations of 23 CFR Part 450 or any other EPA, FHWA or FTA guidance pertaining to transportation conformity or statewide and metropolitan planning. This checklist is not intended for use in documenting transportation conformity for individual transportation projects in nonattainment or maintenance areas. 40 CFR Parts 51 and 93 contain additional criteria for project-level conformity determinations. Document # 46713

Document # 46713

## Appendix B

### FINANCIALLY CONSTRAINED REGIONAL TRANSPORTATION PROJECTS MODELED FOR THE DORSEY DRIVE INTERCHANGE PROJECT LEVEL CONFORMITY ANALYSIS BY MODEL YEAR

Facility	Segment	Improvement Project	Operational
Brunswick Rd.	Sutton Way	Intersection Channelization	2008
E. Main St.	SR 49/Idaho-Maryland Rd./E. Main St.	Intersection Improvements (roundabout)	2008
Sierra College Dr.	Ridge Rd.	Signal & Channel	2008
SR 20-49 Golden Center Freeway	Idaho-Maryland Rd./SR 20 Ramps/Railroad Ave.	Signal & Channel	2008
Pleasant Valley Rd.	Gold Country Estates Dr.	Two-Way Left Turn Lane	2008

SR 20	Dorsey Dr.	Construct Interchange/Phase 1 (SB Onramp)	2018
SR 49	Lady Jane Rd. to Norambagua Ln.	Signal at La Barr Meadows & Channelization	2018
McCourtney Rd.	Brighton St.	Signal & Rechannel	2018
SR 174	Ophir St.	Signal & Channel	2018
SR 20	EB Ramp at McCourtney Rd.	Signal & Channel	2018
W. Main St.	Church St.	Signal & Channel	2018
Pleasant Valley Rd.	Lake Wildwood Dr.	Signal & Channel	2018
SR 174	Brunswick Rd.	Signal & Channel	2018
Combie Rd.	SR 49 to Magnolia Rd.	Improve to 4 Lanes (plus center turn lane)	2018
Brunswick Rd.	Bennett St./Greenhorn Rd.	Signal & Channel	2018
Brunswick Rd.	Old Tunnel Rd.	Signal & Channel	2018
Brunswick Rd.	Loma Rica Dr.	Relocate Intersection	2018
Brunswick Rd.	Dorsey Dr.	Signal & Channel	2018
SR 49	Combie – Wolf Rd. Intersection	2 <sup>nd</sup> SB Left Turn Lane, SR 49 to Combie	2018
SR 49	Combie – Wolf Rd. Intersection	Extend the Right Turn Lane at Wolf Rd. & Combie Rd.	2018
SR 49	McKnight Way	Dual Roundabout & Striping	2018
W. Main St.	Alta St.	Signal & Channel	2018
Pleasant Valley Rd.	Donovan Rd.	Signal & Channel	2018

McKnight Way	Taylorville to Freeman	Widen for Center Turn Lane	2027
Mill St.	McCourtney Rd.	Roundabout	2027

Facility	Segment	Improvement	Model Analysis Year
SR 20	Gold Flat Interchange Ramps	Dual Roundabouts	2027
SR 20	WB Ramp at Mill St.	Roundabout	2027
SR 20	SB Ramp at Brunswick Rd.	Modify Signal & Rechannel	2027
Nevada City Highway	Joerschke Dr.	Signal & Channel	2027
S. Auburn St.	Empire St.	Signal & Channel	2027
SR 20	Dorsey Dr.	Interchange Construction Phase 2 (Complete Entire Interchange)	2027
McCourtney Rd.	Old Auburn Rd. to SR 20	Improve to 4 Lanes	2027

Dorsey Drive Interchange Conformity Analysis Documentation VMT by Speed Bin

Speed Bin	NO BUILD 2008		BUILD 2008		NO BUILD 2018		BUILD 2018		NO BUILD 2027		BUILD 2027	
	VMT	Percent										
0-5 mph	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
5-10 mph	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
10-15 mph	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
15-20 mph	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
20-25 mph	3,011	0.06	3,056	0.06	4,056	0.07	3,844	0.07	3,911	0.06	3,778	0.06
25-30 mph	70,932	1.38	69,421	1.35	89,063	1.52	90,496	1.53	97,898	1.51	97,465	1.50
30-35 mph	268,289	5.23	261,822	5.11	275,489	4.69	266,444	4.52	300,011	4.64	289,978	4.47
35-40 mph	962,911	18.76	975,789	19.04	1,136,500	19.35	1,042,289	17.68	1,277,567	19.76	1,253,167	19.34
40-45 mph	1,123,144	21.89	1,104,989	21.56	1,407,344	23.97	1,352,978	22.94	1,604,389	24.81	1,649,767	25.46
45-50 mph	1,380,411	26.90	1,380,756	26.94	1,575,522	26.83	1,458,400	24.73	1,702,278	26.33	1,914,989	29.55
50-55 mph	1,026,985	20.01	1,033,829	20.17	1,044,019	17.78	1,342,241	22.76	1,084,581	16.77	874,070	13.49
55-60 mph	29,333	0.57	29,311	0.57	20,678	0.35	19,689	0.33	19,733	0.31	21,767	0.34
60-65 mph	3,300	0.06	2,878	0.06	4,100	0.07	4,244	0.07	4,733	0.07	4,689	0.07
65-70 mph	261,484	5.10	261,417	5.10	312,629	5.32	312,918	5.31	367,015	5.68	366,770	5.66
70+ mph	1,889	0.04	1,867	0.04	2,989	0.05	3,122	0.05	3,844	0.06	3,733	0.06
<b>TOTAL</b>	<b>5,131,690</b>	<b>100.00</b>	<b>5,125,134</b>	<b>100.00</b>	<b>6,872,389</b>	<b>100.00</b>	<b>6,896,667</b>	<b>100.00</b>	<b>6,465,961</b>	<b>100.00</b>	<b>6,480,172</b>	<b>100.00</b>





SBUS-CAT	SBUS-DSL	SBUS-TOT	UB-NCAT	UB-CAT	UB-DSL	UB-TOT	MH-NCAT	MH-CAT	MH-DSL	MH-TOT	MCY-NCAT	MCY-CAT	MCY-DSL	MCY-TOT	ALL-TOT
14	67	83	4	33	27	65	157	2551	212	2920	1831	479	0	2309	112056
1	4	5	1	6	5	12	3	53	4	60	20	6	0	26	5132
54	268	333	18	134	107	259	16	255	21	292	3681	857	0	4619	726839
0	0	0	0	0.01	0	0.02	0.01	0.91	0	0.02	0.07	0.01	0	0.08	0.92
0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0.01	0
0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0.01	0.65
0	0	0	0	0.01	0	0.02	0.01	0.01	0	0.02	0.08	0.01	0	0.1	1.58
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.22
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.17
0	0	0	0	0	0	0	0	0	0	0	0.01	0	0	0.01	0.91
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
0	0	0	0	0.01	0	0.02	0.01	0.02	0	0.03	0.1	0.03	0	0.12	2.96
0.02	0.01	0.05	0.1	0.12	0.01	0.23	0.3	0.55	0	0.88	0.95	0.14	0	1.08	23.46
0	0	0	0	0.01	0	0.01	0	0	0	0	0.03	0.01	0	0.04	6.08
0.03	0.01	0.06	0.1	0.13	0.01	0.24	0.31	0.56	0	0.87	0.99	0.15	0	1.14	30.17
0	0.05	0.06	0.1	0.13	0.01	0.24	0.31	0.56	0	0.87	0.99	0.15	0	1.14	30.17
0	0.05	0.06	0.1	0.13	0.01	0.24	0.31	0.56	0	0.87	0.99	0.15	0	1.14	30.17
0	0.01	0.01	0	0.04	0.09	0.14	0.01	0.1	0.04	0.16	0.03	0.01	0	0.04	4.68
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.56
0	0.06	0.06	0	0.05	0.09	0.14	0.01	0.1	0.04	0.16	0.03	0.01	0	0.04	5.31
0	0.01	0.01	0	0	0.01	0.02	0	0.03	0.01	0.04	0	0	0	0	2.41
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07
0	0.01	0.01	0	0	0.01	0.02	0	0.03	0.01	0.04	0	0	0	0	2.48
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.09
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.09
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.05
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02
0.05	0	0.07	0.06	0.36	0	0.42	0.21	3.02	0	3.23	0.44	0.13	0	0.57	220.18
0	0.62	0.62	0	1.24	1.24	1.24	0	0	0.87	0.87	0	0	0	0	20.73

Title : Nevada County Avg 2008 Summer Build  
 Version : Enface2002 V2 2 Apr 23 2003 \*\* WMS Enabled \*\*  
 Run Date : 05/20/06 10:46:54  
 Scene Year: 2008 -- Model Years: 1965 to 2008  
 Season : Summer

Area : Nevada County Average  
 IMA Stat : I and M program in effect  
 Emissions: Turn Per Day

	LDAMCAT	LDA-GAT	LDA-DSL	LDA-TOT	LD11-NGAT	LD11-GAT	LD11-DSL	LD11-TOT	LD12-NGAT	LD12-GAT	LD12-DSL	LD12-TOT	MDV-NGAT	MDV-GAT	MDV-DSL	MDV-TOT	LDHT1-NGAT	LDHT1-GAT	LDHT1-DSL
Vehicles	1056	42202	204	43462	1086	25558	1140	27764	359	17624	199	18183	203	13877	307	14388	41	1063	249
VMT/1000	8	2008	4	2021	20	1177	39	1236	7	827	8	842	4	646	14	864	0	88	23
Trips	4324	264917	1116	270259	4456	158918	6906	170280	1511	110803	1222	113536	877	87197	1845	90020	1348	35808	3134
Reactive Organic Gas Emissions																			
Run Exh	0.04	0.15	0	0.19	0.09	0.15	0	0.25	0.03	0.1	0	0.13	0.02	0.1	0	0.12	0	0	0.01
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0.02	0.19	0	0.21	0.02	0.12	0	0.14	0.01	0.09	0	0.1	0	0.09	0	0.1	0.01	0.01	0
Total Ex	0.06	0.34	0	0.4	0.11	0.28	0	0.39	0.04	0.19	0	0.23	0.03	0.19	0	0.22	0.01	0.02	0.01
Diurnal	0.01	0.07	0	0.08	0.01	0.05	0	0.07	0	0.03	0	0.03	0	0.02	0	0.03	0	0	0
Hot Soak	0.01	0.05	0	0.06	0.01	0.04	0	0.05	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0
Running	0.06	0.19	0	0.26	0.04	0.23	0	0.28	0.01	0.13	0	0.15	0.01	0.11	0	0.12	0.01	0.02	0
Resting	0.01	0.03	0	0.04	0.01	0.02	0	0.03	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0
Total	0.17	0.67	0	0.84	0.19	0.63	0	0.82	0.06	0.38	0	0.45	0.03	0.36	0	0.4	0.02	0.05	0.01
Carbon Monoxide Emissions																			
Run Exh	0.53	5.40	0	5.90	1.3	5.71	0.02	7.04	0.44	3.42	0	3.86	0.39	2.8	0.01	3.19	0.04	0.08	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0
Start Ex	0.14	1.83	0	1.99	0.14	1.52	0	1.66	0.05	0.96	0	1.01	0.04	0.0	0	0.94	0.06	0.16	0
Total Ex	0.67	7.28	0	7.96	1.45	7.23	0.02	8.7	0.49	4.38	0	4.87	0.43	3.7	0.01	4.13	0.1	0.25	0.02
Oxides of Nitrogen Emissions																			
Run Exh	0.04	0.55	0.01	0.6	0.1	0.57	0.05	0.72	0.03	0.51	0.01	0.55	0.03	0.51	0.02	0.56	0	0.04	0.13
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0.01	0.13	0	0.14	0.01	0.09	0	0.09	0	0.1	0	0.1	0	0.09	0	0.09	0	0.06	0
Total Ex	0.05	0.68	0.01	0.74	0.11	0.66	0.05	0.82	0.04	0.61	0.01	0.65	0.03	0.6	0.02	0.65	0	0.09	0.13
Carbon Dioxide Emissions (000)																			
Run Exh	0	0.72	0	0.72	0.01	0.52	0.02	0.54	0	0.37	0	0.37	0	0.39	0.01	0.4	0	0.05	0.01
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0
Total Ex	0	0.74	0	0.75	0.01	0.53	0.02	0.56	0	0.38	0	0.38	0	0.41	0.01	0.41	0	0.05	0.01
PM10 Emissions																			
Run Exh	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0
TireWear	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0
BrakeWear	0	0.03	0	0.03	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0
Total	0	0.06	0	0.06	0	0.04	0	0.04	0	0.03	0	0.03	0	0.03	0	0.03	0	0	0
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumption (000 gallons)																			
Gasoline	0.62	77.09	0	77.71	1.33	55.97	0	57.31	0.45	39.34	0	39.8	0.32	42.13	0	42.45	0.08	5.11	0
Diesel	0	0	0	0.15	0.15	0	1.35	1.35	0	0	0.27	0.27	0	0	0.47	0.47	0	0	1.19



SBUS-DSL	SBUS-TOT	UB-NCAT	UB-GAT	UB-DSL	UB-TOT	MIL-NCAT	MH-GAT	MH-DSL	MH-TOT	MCY-NCAT	MCY-GAT	MCY-DSL	MCY-TOT	ALL-TOT
67	63	4	33	27	65	157	2651	212	2920	1831	479	0	2309	112056
4	5	1	6	5	12	3	53	4	60	20	6	0	26	5125
268	333	18	134	107	239	16	255	21	292	3681	957	0	4619	726839
0	0	0	0.01	0	0.02	0.01	0.01	0	0.02	0.07	0.01	0	0.08	0.92
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
0	0	0	0	0	0	0	0	0	0	0.01	0	0	0.01	0.65
0	0	0	0.01	0	0.02	0.01	0.01	0	0.02	0.08	0.01	0	0.1	1.58
0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.22
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.17
0	0	0	0	0	0	0	0	0	0	0.01	0	0	0.01	0.91
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
0	0	0	0.01	0	0.02	0.01	0.02	0	0.03	0.1	0.03	0	0.12	2.96
0.01	0.05	0.1	0.12	0.01	0.23	0.3	0.55	0	0.96	0.95	0.14	0	1.09	23.42
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04
0	0	0	0.01	0	0.01	0	0	0	0	0.03	0.01	0	0.04	6.88
0.01	0.06	0.1	0.13	0.01	0.24	0.31	0.56	0	0.87	0.98	0.15	0	1.14	30.14
0.05	0.06	0	0.04	0.09	0.14	0.01	0.1	0.04	0.16	0.03	0.01	0	0.04	4.67
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.56
0.06	0.06	0	0.05	0.09	0.14	0.01	0.1	0.04	0.16	0.03	0.01	0	0.04	5.3
0.01	0.01	0	0	0.01	0.02	0	0.03	0.01	0.04	0	0	0	0	2.41
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.09
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.05
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.02
0	0.07	0.06	0.36	0	0.42	0.21	3.01	0	3.22	0.44	0.13	0	0.57	228.88
0.62	0.62	0	0	1.24	1.24	0	0	0.67	0.67	0	0	0	0	26.7



LHD13-TOT	LHD12-NCAT	LHD12-GAT	LHD12-DSL	LHD12-TOT	MHD1-NCAT	MHD1-GAT	MHD1-DSL	MHD1-TOT	HHD1-NCAT	HHD1-GAT	HHD1-DSL	HHD1-TOT	LHW-NCAT	LHW-GAT	LHW-DSL	LHW-TOT	SBUS-NCAT	SBUS-GAT	SBUS-DSL	SBUS-TOT
1282	0	173	139	312	6	141	463	610	2	61	416	479	0	0	0	0	0	0	0	0
75	0	9	8	17	0	7	30	37	0	3	81	83	0	0	0	0	0	0	0	0
37503	0	5714	1748	7462	289	6421	12982	18682	82	2782	2105	4866	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0.01	0.01	0	0.01	0.02	0.03	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0
0.01	0	0	0	0	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0
0.02	0	0	0	0	0	0.01	0.01	0.02	0	0.02	0.02	0.04	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.03	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.05	0	0.01	0	0.01	0	0.02	0.01	0.03	0	0.04	0.02	0.07	0	0	0	0	0	0	0	0
0.03	0	0.01	0.01	0.01	0.01	0.02	0.04	0.07	0.01	0.12	0.09	0.22	0	0	0	0	0	0	0	0
0.01	0	0.02	0	0.02	0.02	0.00	0	0.11	0.02	0.17	0	0.19	0	0	0	0	0	0	0	0
0.1	0	0.02	0	0.02	0.02	0.00	0	0.11	0.02	0.17	0	0.19	0	0	0	0	0	0	0	0
0.14	0	0.03	0.01	0.03	0.02	0.12	0.04	0.18	0.03	0.29	0.11	0.43	0	0	0	0	0	0	0	0
0.05	0	0	0.02	0.03	0	0.01	0.12	0.13	0	0.03	0.31	0.35	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0.06	0.06	0	0	0	0	0	0	0	0
0.06	0	0.01	0	0.01	0	0.01	0	0.01	0	0.02	0	0.02	0	0	0	0	0	0	0	0
0.11	0	0.01	0.02	0.04	0	0.02	0.13	0.15	0	0.06	0.36	0.43	0	0	0	0	0	0	0	0
0.04	0	0.01	0	0.01	0	0	0.05	0.05	0	0	0.19	0.2	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.04	0	0.01	0	0.01	0	0	0.05	0.05	0	0	0.2	0.2	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0.01	0.01	0	0.01	0.01	0.01	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.54	0	0.55	0	0.55	0.02	0.43	4.56	4.56	0.01	0.21	17.74	17.74	0	0	0	0	0	0	0	0
0.76	0	0.36	0	0.36	0	0	4.56	4.56	0	0	17.74	17.74	0	0	0	0	0	0	0	0

SBUS CAT	SBUS DBL	SBUS TOT	UB NCAT	UB CAT	UB DSI	UB TOT	MH NCAT	MH CAT	MH DSI	MH TOT	MCY NCAT	MCY CAT	MCY DSI	MCY TOT	ALL TOT
15	68	103	1	45	34	80	10	4748	441	5197	893	1021	0	1913	148128
1	5	5	0	7	5	12	0	87	8	95	8	11	0	19	5872
59	352	412	3	181	135	320	1	475	44	520	1785	2041	0	3828	832530
0	0	0	0	0.01	0	0.02	0	0.01	0	0.01	0.03	0.02	0	0.05	0.3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
0	0	0	0	0.01	0	0.02	0	0.01	0	0.01	0.03	0.03	0	0.06	0.59
0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0.01	0.15
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.11
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.81
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08
0	0	0	0	0.01	0	0.02	0	0.01	0	0.01	0.03	0.04	0	0.07	1.54
0.01	0.01	0.02	0.01	0.1	0.01	0.12	0.02	0.17	0	0.19	0.35	0.12	0	0.46	8.97
0	0	0	0	0	0	0.01	0	0	0	0	0	0	0	0	0.04
0	0	0	0	0.01	0	0.01	0	0	0	0	0.02	0.02	0	0.04	3.22
0.02	0.01	0.03	0.01	0.12	0.01	0.14	0.02	0.17	0	0.19	0.36	0.14	0	0.5	12.23
0	0.04	0.04	0	0.04	0.05	0.1	0	0.05	0.03	0.08	0.01	0.01	0	0.02	1.88
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.33
0	0.05	0.05	0	0.04	0.05	0.1	0	0.05	0.03	0.08	0.01	0.01	0	0.02	2.09
0	0.01	0.01	0	0	0.01	0.02	0	0.05	0.01	0.06	0	0	0	0	2.73
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08
0	0.01	0.01	0	0	0.01	0.02	0	0.05	0.01	0.06	0	0	0	0	2.82
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.06
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.06
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03
0.05	0	0.05	0.01	0.41	0	0.42	0.01	4.84	0	4.85	0.17	0.28	0	0.43	259.97
0	0.71	0.71	0	0	1.23	1.23	0	0	1.2	1.2	0	0	0	0	27.25

Title : Nevada County Avg 2018 Summer Build  
 Version : Enfac2002 V2 2 Apr 23 2003 \*\* W/S Enabled \*\*  
 Run Date : 06/14/08 16:10:11  
 Scen Year : 2018 - Model Years: 1973 to 2018  
 Season : Summer  
 Area : Nevada County Average  
 RM Stat : I and M program in effect  
 Emissions: Tons Per Day

	LDA-RGAT	LDA-CAT	LDA-DSL	LDA-TOT	LDT1-RGAT	LDT1-CAT	LDT1-DSL	LDT1-TOT	LDT2-RGAT	LDT2-CAT	LDT2-DSL	LDT2-TOT	MDV-RGAT	MDV-CAT	MDV-DSL	MDV-TOT	LHDT1-RGAT	LHDT1-CAT	LHDT1-DSL	LHDT1-TOT
Vehicles	44	57384	53	57491	06	30508	485	37159	32	24155	99	24287	32	19993	200	19215	3	19215	3	1041
WMT/1000	0	2367	1	2368	1	1432	11	1464	0	950	3	953	0	737	5	743	0	743	0	60
Trips	168	368336	258	369065	331	226271	2632	228233	123	150086	574	150795	126	117426	1193	118734	101	118734	101	34411
Reactive Organic Gas Emissions																				
Run Exh	0	0.04	0	0.04	0	0.06	0	0.06	0	0.04	0	0.04	0	0.04	0	0.05	0	0.05	0	0
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.07	0	0.07	0	0.06	0	0.06	0	0.05	0	0.05	0	0.05	0	0.06	0	0.06	0	0.01
Total Ex	0	0.11	0	0.12	0.01	0.12	0	0.12	0	0.09	0	0.09	0	0.1	0	0.1	0	0.1	0	0.01
Diurnal	0	0.05	0	0.05	0	0.04	0	0.04	0	0.03	0	0.03	0	0.02	0	0.02	0	0.02	0	0
Hot Soak	0	0.04	0	0.04	0	0.03	0	0.03	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0
Running	0	0.11	0	0.11	0	0.19	0	0.19	0	0.12	0	0.12	0	0.1	0	0.1	0	0.1	0	0.03
Resting	0	0.03	0	0.03	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0
Total	0	0.34	0	0.34	0.01	0.4	0	0.41	0	0.27	0	0.27	0	0.26	0	0.26	0	0.26	0	0.04
Carbon Monoxide Emissions																				
Run Exh	0.01	2.64	0	2.65	0.08	2.4	0.01	2.48	0.03	1.66	0	1.69	0.06	1.52	0	1.59	0	1.59	0	0.02
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.84	0	0.84	0.01	0.76	0	0.77	0	0.55	0	0.56	0.01	0.56	0	0.57	0	0.57	0	0.06
Total Ex	0.02	2.86	0	2.9	0.09	3.16	0.01	3.26	0.03	2.21	0	2.25	0.07	2.08	0	2.16	0.01	2.16	0.01	0.12
Oxides of Nitrogen Emissions																				
Run Exh	0	0.18	0	0.18	0.01	0.23	0.01	0.25	0	0.21	0	0.22	0	0.22	0.01	0.23	0	0.23	0	0.01
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.06	0	0.06	0	0.05	0	0.05	0	0.06	0	0.06	0	0.06	0	0.06	0	0.06	0	0.06
Total Ex	0	0.24	0	0.24	0.01	0.28	0.01	0.3	0	0.27	0	0.27	0	0.28	0.01	0.29	0	0.29	0	0.07
Carbon Dioxide Emissions (000)																				
Run Exh	0	0.83	0	0.83	0	0.64	0	0.64	0	0.42	0	0.42	0	0.48	0	0.45	0	0.45	0	0.03
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.03	0	0.03	0	0.02	0	0.02	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0
Total Ex	0	0.86	0	0.86	0	0.66	0	0.67	0	0.44	0	0.44	0	0.48	0	0.47	0	0.47	0	0.03
PM10 Emissions																				
Run Exh	0	0.02	0	0.02	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.02	0	0.02	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0
TireWear	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0
BrakeW	0	0.03	0	0.03	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0
Total	0	0.07	0	0.07	0	0.05	0	0.05	0	0.04	0	0.04	0	0.03	0	0.03	0	0.03	0	0
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOx	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumption (000 gallons)																				
Gasoline	0.02	68.27	0	68.29	0.08	68.19	0	68.27	0.03	45.24	0	45.27	0.05	47.83	0	47.87	0.01	47.87	0.01	3.54
B diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



SBUS-NCAT	SBUS-CAT	SBUS-DSL	SBUS-TOT	UB-NCAT	UB-CAT	UB-DSL	UB-TOT	MH-NCAT	MH-CAT	MH-DSL	MH-TOT	MCY-NCAT	MCY-CAT	MCY-DSL	MOY-TOT	ALL-TOT
0	15	88	103	1	45	34	80	10	4746	441	5197	893	1021	0	1913	146128
0	1	5	5	0	7	5	12	0	87	8	85	0	11	0	19	5972
0	59	352	412	3	181	136	320	1	475	44	520	1795	2041	0	3826	932530
0	0	0	0	0	0.01	0	0.02	0	0.01	0	0.01	0.03	0.02	0	0.05	0.3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.28
0	0	0	0	0	0.01	0	0.02	0	0.01	0	0.01	0.03	0.03	0	0.06	0.59
0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0	0.01	0.15
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.11	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01	0.61
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08	0
0	0	0	0	0	0.01	0	0.02	0	0.01	0	0.01	0.03	0.04	0	0.07	1.54
0	0.01	0.01	0.02	0.01	0.1	0.01	0.12	0.02	0.17	0	0.19	0.36	0.12	0	0.47	6.94
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.04	0
0	0	0	0	0	0.01	0	0.01	0	0	0	0	0.02	0.02	0	0.04	3.22
0	0.02	0.01	0.03	0.01	0.12	0.01	0.14	0.02	0.17	0	0.19	0.37	0.14	0	0.51	12.2
0	0	0.04	0.05	0	0.04	0.05	0.1	0	0.05	0.03	0.08	0.01	0.01	0	0.02	1.69
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.33	0
0	0	0.05	0.05	0	0.04	0.05	0.1	0	0.05	0.03	0.08	0.01	0.01	0	0.02	2.09
0	0	0.01	0.01	0	0	0.01	0.02	0	0.05	0.01	0.06	0	0	0	0	2.82
0	0	0	0	0	0	0.01	0.02	0	0.05	0.01	0.06	0	0	0	0	2.74
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08
0	0	0.01	0.01	0	0	0.01	0.02	0	0.05	0.01	0.06	0	0	0	0	2.82
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.22
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03
0	0.05	0	0.05	0.01	0.42	0	0.42	0.01	4.85	0	4.86	0.17	0.28	0	0.43	260.23
0	0	0.71	0.71	0	0	1.23	1.23	0	0	1.2	1.2	0	0	0	0	27.25

2027 No Build

Title : Nevada County Avg 2027 Summer No Build  
 Version : Enlac2002 V2.2 Apr 23 2003 \*\* WIS Enabled \*\*  
 Run Date : 05/26/06 13:03:10  
 Scan Year: 2027 -- Model Years: 1992 to 2027

Season : Summer  
 Area : Nevada County Average  
 RM Stat : I and M program in effect  
 Emissions: Tons Per Day

	LDA-NCAT	LDA-CAT	LDA-DSL	LDA-TOT	LD1-NCAT	LD1-CAT	LD1-DSL	LD1-TOT	LD2-NCAT	LD2-CAT	LD2-DSL	LD2-TOT	MDV-NCAT	MDV-CAT	MDV-DSL	MDV-TOT	LHD1-NCAT	LHD1-CAT	LHD1-DSL	LHD1-TOT
Vehicles	0	72853	10	72864	0	46916	188	47104	0	30750	34	30784	0	24259	96	24356	0	976	226	
VMT/1000	0	2626	0	2626	0	1622	3	1625	0	1048	1	1049	0	819	2	821	0	43	11	
Trips	0	455023	48	455070	0	290257	846	291103	0	189541	179	189720	0	149129	514	149643	0	32341	2839	
Reactive Organic Gas Emissions																				
Run Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Start Ex	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0	
Total Ex	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	
Dismal	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.02	0	0.02	0	0	0	
Hot Soak	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	
Running	0	0.09	0	0.09	0	0.13	0	0.13	0	0.1	0	0.09	0	0.09	0	0.09	0	0.04	0	
Resting	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	
Total	0	0.22	0	0.22	0	0.25	0	0.25	0	0.21	0	0.21	0	0.19	0	0.19	0	0.05	0	
Carbon Monoxide Emissions																				
Run Exh	0	1.31	0	1.31	0	1.17	0	1.17	0	1.1	0	1.1	0	1.08	0	1.08	0	0.01	0.01	
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Start Ex	0	0.45	0	0.45	0	0.38	0	0.38	0	0.37	0	0.37	0	0.39	0	0.39	0	0.07	0	
Total Ex	0	1.76	0	1.76	0	1.55	0	1.55	0	1.46	0	1.46	0	1.47	0	1.47	0	0.08	0.01	
Oxides of Nitrogen Emissions																				
Run Exh	0	0.1	0	0.1	0	0.11	0	0.11	0	0.12	0	0.12	0	0.12	0	0.12	0	0.01	0.01	
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Start Ex	0	0.03	0	0.03	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.05	0	
Total Ex	0	0.14	0	0.14	0	0.13	0	0.14	0	0.15	0	0.15	0	0.15	0	0.15	0	0.05	0.02	
Carbon Dioxide Emissions (900)																				
Run Exh	0	0.91	0	0.91	0	0.71	0	0.71	0	0.47	0	0.47	0	0.5	0	0.5	0	0.02	0.01	
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Start Ex	0	0.04	0	0.04	0	0.03	0	0.03	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	
Total Ex	0	0.95	0	0.95	0	0.74	0	0.74	0	0.49	0	0.49	0	0.52	0	0.52	0	0.03	0.01	
PM10 Emissions																				
Run Exh	0	0.02	0	0.02	0	0.01	0	0.01	0	0.02	0	0.02	0	0.01	0	0.01	0	0	0	
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Start Ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Ex	0	0.02	0	0.02	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	
TireWear	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	
BrakeWt	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	
Total	0	0.06	0	0.06	0	0.05	0	0.05	0	0.04	0	0.04	0	0.03	0	0.03	0	0	0	
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOx	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	
Fuel Consumption (900 gallons)																				
Gasoline	0	97.17	0	97.17	0	75.7	0	75.7	0	50.01	0.02	50.01	0	53.2	0.06	53.2	0	2.59	0	
Diesel	0	0	0	0	0	0	0.1	0.1	0	0	0.02	0.02	0	0	0	0.06	0	0	0.55	



SEBUS-CAT	SEBUS-DSL	SEBUS-TOT	UB-NCAT	UB-GAT	UB-DSL	UB-TOT	MH-NCAT	MH-GAT	MH-DSL	MH-TOT	MGY-NCAT	MGY-GAT	MGY-DSL	MGY-TOT	ALL-TOT
16	109	125	0	53	44	97	0	797	745	8721	577	1039	0	1016	198182
1	5	6	0	7	6	13	0	129	12	141	5	9	0	14	6466
62	436	489	0	211	176	387	0	788	74	872	1154	2079	0	3232	1154030
0	0	0	0	0	0	0.01	0	0	0	0	0.02	0.02	0	0.03	0.15
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.15
0	0	0	0	0.01	0	0.01	0	0	0	0	0.02	0.02	0	0.04	0.3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.11
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.49
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07
0	0	0	0	0.01	0	0.01	0	0	0	0	0.02	0.03	0	0.05	1.05
0.01	0.01	0.02	0	0.08	0.01	0.08	0	0.04	0	0.05	0.22	0.11	0	0.33	7.11
0	0.03	0.03	0	0.03	0.04	0.07	0	0.03	0.02	0.05	0.01	0.01	0	0.02	0.82
0	0.01	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0.07
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2
0	0.04	0.04	0	0.03	0.04	0.08	0	0.03	0.02	0.05	0.01	0.01	0	0.02	1.09
0	0.01	0.01	0	0	0.02	0.02	0	0.07	0.02	0.09	0	0	0	0	2.96
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
0	0.01	0.01	0	0	0.02	0.02	0	0.07	0.02	0.09	0	0	0	0	3.07
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.01
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.06
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.09
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.23
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03
0.05	0	0.05	0	0.42	0	0.42	0	7.14	0	7.14	0.11	0.21	0	0.32	267.48
0	0.77	0.77	0	1.36	1.36	1.36	0	0	1.78	1.78	0	0	0	0	24.55

Title : Nevada County Avg 2027 Summer Build  
 Version : Emfac2002 V2.2 Apr 23 2003 \*\*V05S Enabled\*\*

Run Date : 05/26/06 13:04:02

Scen Year : 2027 - Model Years: 1982 to 2027

Season : Summer

Area : Nevada County Average

HM Stat : I and M program in effect

Emissions: Tons Per Day

	UDA_NCA	UDA_GAT	UDA_USL	UDA_TOT	LD11_NCA	LD11_GAT	LD11_USL	LD11_TOT	LD11_D81	LD11_T01	LD12_NCA	LD12_GAT	LD12_USL	LD12_TOT	LD12_D51	LD12_T01	MDV_NCA	MDV_GAT	MDV_USL	MDV_TOT	MDV_D51	MDV_T01	LHD11_NCA	LHD11_GAT	LHD11_USL	LHD11_TOT	LHD11_D51	LHD11_T01	
Vehicles	0	72864	10	72874	0	46916	188	47104	0	30750	0	30750	34	30784	0	24259	0	24259	98	24356	0	24356	0	978	228	1204	0	0	0
VMT/1000	0	2632	0	2632	0	1828	3	1829	0	1050	0	1050	1	1051	0	821	0	821	2	823	0	823	0	43	11	54	0	0	0
Trigs	0	455070	48	455118	0	200257	846	291103	0	189041	0	189041	179	189220	0	148129	0	148129	514	149643	0	149643	0	32341	2839	35180	0	0	0
Reactive Organic Gas Emissions																													
Run Exh	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.01	0	0	0	0.01	0
Total Ex	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.05	0	0.01	0	0	0	0.01	0
Diurnal	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0	0	0	0	0	0
Hol Soak	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0
Running	0	0.09	0	0.09	0	0.13	0	0.13	0	0.1	0	0.1	0	0.1	0	0.09	0	0.09	0	0.09	0	0.09	0	0.04	0	0	0	0.04	0
Resting	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0
Total	0	0.22	0	0.22	0	0.25	0	0.25	0	0.21	0	0.21	0	0.21	0	0.19	0	0.19	0	0.19	0	0.19	0	0.05	0	0	0	0.05	0
Carbon Monoxide Emissions																													
Run Exh	0	1.31	0	1.31	0	1.17	0	1.17	0	1.1	0	1.1	0	1.1	0	1.08	0	1.08	0	1.09	0	1.09	0	0.01	0.01	0.01	0.01	0.01	0.01
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.45	0	0.45	0	0.39	0	0.39	0	0.37	0	0.37	0	0.37	0	0.39	0	0.39	0	0.39	0	0.39	0	0.07	0	0	0.07	0	0.07
Total Ex	0	1.76	0	1.76	0	1.55	0	1.56	0	1.47	0	1.47	0	1.47	0	1.48	0	1.48	0	1.49	0	1.49	0	0.08	0.01	0.01	0.01	0.01	0.01
Oxides of Nitrogen Emissions																													
Run Exh	0	0.1	0	0.1	0	0.11	0	0.11	0	0.12	0	0.12	0	0.12	0	0.12	0	0.12	0	0.12	0	0.12	0	0.01	0.01	0.01	0.01	0.01	0.01
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.03	0	0.03	0	0.02	0	0.02	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.03	0	0.05	0	0	0.05	0	0.05
Total Ex	0	0.14	0	0.14	0	0.13	0	0.14	0	0.15	0	0.15	0	0.15	0	0.15	0	0.15	0	0.15	0	0.15	0	0.05	0.02	0.02	0.02	0.02	0.02
Carbon Dioxide Emissions (000)																													
Run Exh	0	0.91	0	0.91	0	0.71	0	0.71	0	0.47	0	0.47	0	0.47	0	0.5	0	0.5	0	0.5	0	0.5	0	0.02	0.01	0.01	0.01	0.01	
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0.04	0	0.04	0	0.03	0	0.03	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0
Total Ex	0	0.95	0	0.95	0	0.74	0	0.74	0	0.49	0	0.49	0	0.49	0	0.52	0	0.52	0	0.52	0	0.52	0	0.03	0.01	0.01	0.01	0.01	0.01
PM10 Emissions																													
Run Exh	0	0.02	0	0.02	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0
Idle Exh	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Ex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Ex	0	0.02	0	0.02	0	0.01	0	0.01	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0.02	0	0	0	0	0	0	0
TireWear	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0
BrakeWf	0	0.04	0	0.04	0	0.02	0	0.02	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0
Total	0	0.08	0	0.08	0	0.05	0	0.05	0	0.04	0	0.04	0	0.04	0	0.03	0	0.03	0	0.03	0	0.03	0	0	0	0	0	0	0
Lead	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOX	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fuel Consumption (000 gallons)																													
Gasoline	0	97.23	0	97.23	0	75.74	0	75.74	0	50.04	0	50.04	0	50.04	0	53.23	0	53.23	0	53.23	0	53.23	0	2.59	0	2.59	0	2.59	0
Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

LHDT2-KL	LHDT2-CA	LHDT2-DS	LHDT2-JC	MHDT-NG	MHDT-CA	MHDT-DS	MHDT-TO	HHDT-NG	HHDT-CA	HHDT-DS	HHDT-TOT	LHV-NGCA	LHV-CAT	LHV-DSL	LHV-TOT	SBUS-NG	SBUS-CA	SBUS-DS	SBUS-TD	UB-NGAT
0	185	127	292	0	124	448	571	0	32	410	448	0	0	0	0	0	16	109	125	0
0	6	6	14	0	5	25	31	0	1	72	73	0	0	0	0	0	1	5	6	0
0	5468	1593	7081	0	5655	12551	18206	0	1449	2104	3553	0	0	0	0	0	62	436	499	0
0	0	0	0	0	0	0	0	0	0	0.01	0.01	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0.01	0	0.01	0	0.01	0	0.02	0	0.02	0.02	0.04	0	0	0	0	0	0	0	0	0
0	0	0	0.01	0	0.01	0.03	0.03	0	0.04	0.06	0.1	0	0	0	0	0	0.01	0.01	0.02	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0.01	0	0.01	0	0.05	0	0.05	0	0.07	0	0.07	0	0	0	0	0	0	0	0	0
0	0.02	0	0.02	0	0.05	0.03	0.08	0	0.11	0.06	0.19	0	0	0	0	0	0.01	0.01	0.02	0
0	0	0	0.01	0	0	0.04	0.05	0	0.01	0.11	0.12	0	0	0	0	0	0	0.03	0.03	0
0	0	0	0	0	0	0	0	0	0	0.06	0.06	0	0	0	0	0	0	0.01	0.01	0
0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0.01	0	0	0	0	0	0	0	0	0
0	0.01	0.01	0.02	0	0.01	0.05	0.06	0	0.02	0.17	0.19	0	0	0	0	0	0	0.04	0.04	0
0	0	0	0.01	0	0	0.04	0.04	0	0	0.17	0.17	0	0	0	0	0	0	0.01	0.01	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0.46	0	0.46	0	0.34	0	0.34	0	0.09	0	0.09	0	0	0	0	0	0.05	0	0.05	0
0	0	0.31	0.31	0	0	3.76	3.76	0	0	15.88	15.88	0	0	0	0	0	0	0.77	0.77	0

UB-DAT	UB-DSL	UB-TOT	MH-NCAT	MH-DAT	MH-DSL	MH-TOT	MOY-NCA	MOY-DAT	MOY-DSL	MEY-TOT	ALL-TOT
53	44	97	0	7977	745	8721	577	1039	0	1616	188162
7	6	13	0	129	12	141	5	9	0	14	6480
211	176	387	0	798	74	872	1154	2079	0	3232	1154630
0	0	0.01	0	0	0	0	0.02	0.02	0	0.03	0.15
0	0	0	0	0	0	0	0	0	0	0.01	0.01
0	0	0	0	0	0	0	0	0	0	0.01	0.15
0.01	0	0.01	0	0	0	0	0.02	0.02	0	0.04	0.3
0	0	0	0	0	0	0	0	0	0	0	0.11
0	0	0	0	0	0	0	0	0	0	0	0.08
0	0	0	0	0	0	0	0	0	0	0	0.49
0	0	0	0	0	0	0	0	0	0	0	0.07
0.01	0	0.01	0	0	0	0	0.02	0.03	0	0.05	1.05
0.07	0.01	0.07	0	0.04	0	0.04	0.21	0.09	0	0.3	5.25
0	0	0	0	0	0	0	0	0	0	0.03	0.03
0.01	0	0.01	0	0	0	0	0.01	0.02	0	0.03	1.84
0.08	0.01	0.08	0	0.04	0	0.05	0.22	0.11	0	0.33	7.13
0.03	0.04	0.07	0	0.03	0.02	0.05	0.01	0.01	0	0.02	0.82
0	0	0	0	0	0	0	0	0	0	0	0.07
0	0	0	0	0	0	0	0	0	0	0	0.2
0.03	0.04	0.08	0	0.03	0.02	0.05	0.01	0.01	0	0.02	1.09
0	0.02	0.02	0	0.07	0.02	0.09	0	0	0	0	2.96
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0.1
0	0.02	0.02	0	0.07	0.02	0.09	0	0	0	0	3.07
0	0	0	0	0	0	0	0	0	0	0	0.07
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0.01
0	0	0	0	0	0	0	0	0	0	0	0.08
0	0	0	0	0	0	0	0	0	0	0	0.06
0	0	0	0	0	0	0	0	0	0	0	0.09
0	0	0	0	0	0	0	0	0	0	0	0.23
0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0.03
0.41	0	0.41	0	7.14	0	7.14	0.11	0.21	0	0.32	287.65
0	1.36	1.36	0	0	1.79	1.79	0	0	0	0	24.6

Conformity Working Group: Western Nevada County Non-attainment Area	<b>MEETING AGENDA</b>
	<b>Date:</b> Tuesday, November 16th, 2004 <b>Time:</b> 10:30-12:00 p.m. <b>Location:</b> Nevada County Transportation Commission, 101 Providence Mine Road, Suite 102, Nevada City, CA 95959
<b>Meeting called by:</b>	Dan Landon, Nevada County Transportation Commission (NCTC)
<b>Facilitator:</b>	Dan Landon, NCTC
<b>Recorder:</b>	Mike Woodman, NCTC
<b>Invitees:</b>	NSAQMD, FHWA, FTA, EPA, ARB, and Caltrans District 3
<b>Purpose of Meeting:</b>	Review Interagency Consultation Procedure Draft MOA
<b>Decisions to be Made:</b>	Determine if there are any details contained in the Interagency Consultation Procedure draft document that need to be added or are unclear and need to be strengthened.
<b>Method of Decision Making:</b>	Consensus of conformity working group.
<b>Material to be reviewed in advance of meeting</b>	Agenda, Draft Transportation Conformity Procedures Memorandum of Agreement for western Nevada County.

#	Time	Topic	Presenter	Desired Outcome
1	10:30	Introductions	Dan Landon	
2	10:40	Opening (Purpose of Meeting)	Dan Landon	
3	10:50	Agenda Review	Dan Landon	Is there anything that needs to be added, deleted, or changed?
4	11:00	Discussion Items – 1) Review Interagency Consultation Procedures – ask for comments from each agency. 2) Include in discussion these items or any other unresolved issues: a) Timing of legal counsel review. b) Public Hearing b) Need for a quorum 3) Summarize changes & decisions. 4) Determine format for the MOA to be signed. 5) What are the next steps – review timeline/schedule; determine when agencies review documents; determine when approvals are needed.	Dan Landon	1) Make any necessary changes per comments to everyone's satisfaction. 2) Resolve all issues – or list for future discussion as unresolved action items. 3) Make a decision on document format and content 4) Set dates and methodology for signing of documents. 5) Make sure group is on schedule.
5	11:45	Summarize changes to document and decisions made and future timeline/schedule.	Dan Landon	Get as close as possible to a final draft document.
6	12:00	ADJOURN		Thank you for your participation.

**Conformity Working Group Meeting  
November 16, 2004**

**Purpose:** The purpose of this meeting was to review and comment on the draft Consultation Procedures for Transportation Conformity Memorandum of Agreement (MOA).

**Participants:**

Mike Brady, Caltrans Head Quarters  
Gretchen Bennitt, Northern Sierra Air Quality Management District (NSAQMD)  
Sam Longmire, NSAQMD  
Dan Landon, Nevada County Transportation Commission (NCTC)  
Mike Woodman, NCTC  
Karina O'Connor, Environmental Protection Agency  
Bruce Tuter, California Air Resources Board (CARB)  
Dennis Wade, CARB  
Steve Luxenberg, Federal Highway Administration  
Ted Mately, Federal Transit Administration

**Facilitator:**

Dan Landon, NCTC

**Comments received on the draft Procedures for Transportation Conformity MOA:**

It was suggested that the word "consultation" be added to the title of the document for clarification.

After discussion it was suggested that first Code of Federal Regulations citation should actually be 40 CFR Part 90.105 and that "Subpart A" should be deleted and that "interagency consultation" should be inserted for clarification.

Bruce Tuter asked whether or not the Public Works Directors from the jurisdictions in western Nevada County were interested in being involved in the interagency consultation process. Dan Landon indicated that he would contact them to see if they were interested in participating.

In section 2.1.1.3, it was suggested to delete "group decisions" and replace with "activities relating to the interagency consultation process".

In section 2.1.1.4, Mike Brady indicated that Caltrans should be added to language in this section describing the initiation of the interagency consultation process for their transportation projects.

In section 2.1.1.5, it Gretchen Bennitt suggested that the wording "related to transportation" be added to clarify the need to initiate interagency consultation in relation to SIP revision in this section.

Mike Brady, mentioned that a new section (2.1.1.6.) should be added and include language stating that "Caltrans will be the lead agency responsible for preparing and submitting the transportation conformity analysis and maintain records of the transportation conformity process". Mike stated that he would work on providing some specific language for inclusion.

Karina O'Connor stated that under section 2.1.1. "Working Group Roles and Responsibilities", and probably also under each agencies specific responsibilities that language should be added that states everyone will be responsible for "review and comment as appropriate on the transportation conformity analysis and finding".

In section 2.2.1, it was suggested that instead of specifying Federal transportation regulations that the word transportation be deleted so that the statement was more inclusive.

It was also suggested that to avoid awkward grammar in the sections immediately following the agency description that the wording be changed to "Specifically, they are responsible for the following".

In section 2.2.2 (Caltrans), Mike Brady indicated that language should be include that identifies Caltrans as the lead agency responsible for preparing and submitting the transportation conformity analysis and maintain records of the transportation conformity process. Mike stated that he would provide some specific language for this section.

Mike Brady suggested that language be added to section 2.2.2.9 that states that the draft Conformity Analysis will be available for public comment for at least 30 days.

Karina O'Connor stated that "making an adequacy determination on submitted budgets' should be added to the responsibilities identified under section 2.3.1.

A representative of CARB stated that their agency should be listed in section 2.3.2.3.

In section 2.4.1.13, it was suggested to include language that identifies that NCTC model outputs would be provided to "Caltrans or other appropriate agency".

Gretchen Bennitt indicated that she would like to provide language to be used for the description relating to the NSAQMD.

It was agreed that section 2.4.2.2, should be deleted from the document.

It was suggested that the word "ones" be deleted and replaced with "non-federal projects" in the second sentence of section 4.1.1 for clarification.

In section 5.5, it was suggested that the wording "or an MPO" could be deleted.

The group agreed that the document would be revised based on these comments and any additional comments that were received by December 15<sup>th</sup> and then release the final draft. The Conformity Working Group agreed to meet once again in early January to review the final document.

# MEETING AGENDA

Conformity Working  
Group: Western Nevada  
County Non-attainment  
Area

**Date:** Thursday, June 16th, 2005

**Time:** 10:00-12:00 p.m.

**Location:** Caltrans Venture Oaks, 2389 Gateway Oaks Blvd.,  
Sacramento (Main Conference Room)

<b>Meeting called by:</b>	Dan Landon, Nevada County Transportation Commission (NCTC)
<b>Facilitator:</b>	Dan Landon, NCTC
<b>Recorder:</b>	Mike Woodman, NCTC
<b>Invitees:</b>	NSAQMD, FHWA, FTA, EPA, ARB, and Caltrans District 3
<b>Purpose of Meeting:</b>	Interagency Consultation to review the regionally significant projects and traffic modeling assumptions
<b>Decisions to be Made:</b>	Agreement on the regionally significant projects list and traffic modeling assumptions
<b>Method of Decision Making:</b>	Consensus of conformity working group.
<b>Material to be reviewed in advance of meeting</b>	Agenda, List of Regionally Significant Projects, Project Exemptions, and, the NCTC Traffic Model Report

#	Time	Topic	Presenter	Desired Outcome
1	10:00	Introductions	Dan Landon	
2	10:10	Opening (Purpose of Meeting)	Dan Landon	
3	10:15	Agenda Review	Dan Landon	Is there anything that needs to be added, deleted, or changed?
4	10:20	Discussion Items – 1) Review the Regionally Significant/Exempt projects list. 2) NCTC Traffic Model Assumptions. 3) Regional Emissions Analysis/Modeling 4) When Federal Approval is anticipated on regionally significant projects. 5) Update on Status of MOA 6) Schedule information spreadsheet (Jeff Pulverman) 7) What are the next steps and timeline.	Mike Woodman Dan Landon	1) Reach consensus on the list of regionally significant projects/exemptions. 2) Acceptance of the NCTC traffic model assumptions. 3) Come to agreement on the years to be modeled in the emissions analysis. 4) Identify when the transportation conformity determination needs to be made. 5) Make progress towards finalizing the MOA. 6 & 7) Make sure group is on schedule.
5	11:45	Summarize key decisions and consensus reached on agenda items.	Dan Landon	
6	12:00	ADJOURN		Thank you for your participation.

**Western Nevada County Conformity Working Group Meeting  
June 16<sup>th</sup>**

Participants: Jeff Pulverman (Caltrans D-3), Bill Davis (Caltrans D-3), Steve Luxemberg (FHWA), Sam Longmire (NSAQMD), Scott Forsythe ((Caltrans D-3), Mike Brady (Caltrans HQ), Tyler Penney (Prism Engineering), Grant Johnson (Prism Engineering), Dennis Wade (ARB), Ann Marie Robinson (Caltrans D-3), John Kelly (EPA Region 9), Karina Oconner (EPA Region 9), Mike Woodman (NCTC), and Dan Landon (NCTC).

The Conformity Working group reviewed the Draft Regionally Significant Project List and made the following recommendations:

- FHWA would like to review a graphic of the GVCIP interchange modification project to verify that it qualifies as exempt.
- The description of the La Barr Meadows Rd./SR 49 signal should be amended to reflect that the channelization is associated with signalization project.
- The Magnolia Rd./Kingstone Ln. left turn pocket should be exempt as a channelization project.
- The Mill St./McCourtney Rd. roundabout should be exempt as a channelization project.
- The SR 20 WB ramp/Mill St. should be exempt as a channelization project.
- The description of the SR 20/Gold Flat Rd. interchange ramp improvements should be listed as roundabouts and is exempt as a channelization project.
- The SR 49/McKnight Wy. dual roundabouts is an exempt as a channelization project.
- For the projects that list the improvement as "add 8' of pavement" clarify that these are shoulder improvements.
- The SR 49/Combie/Wolf Rd intersection is exempt as a channelization project.

The list with the revisions above is attached.

The SR 49/La Barr Meadows Rd. improvement project, programmed in the State Transportation Improvement Program (STIP), was determined by the Conformity Working Group to be exempt from regional emissions analysis requirements per 40 CFR 93.127 "Table 3" as a signalization/channelization project. The SR 49/La Barr Meadows Rd. project will relocate the intersection to the south and to allow for the installation of a signal. Channelization to the north and south of the new intersection is necessary to provide for adequate storage and provide for left-turn movements.

The Conformity Working group agreed that with 2009 as the attainment date for western Nevada County the appropriate modeling analysis years would be 2008, 2018, and 2028.

The Conformity Working group reviewed the latest adopted modeling assumptions contained in the Nevada County Transportation Commission's traffic model and approved them for use. Grant Johnson of PRISM Engineering will begin preparing the transportation model to include the non-exempt projects in the appropriate modeling years. Once the model preparation is completed, Grant will run the model for the analysis years and supply the outputs to Scott Forsythe at Caltrans District 3.

The Conformity Working group noted that they would like to review the potential gap that may exist between the eastern boundary of the traffic model and the non-attainment boundary to

determine if it is necessary to expand the model boundary or conduct offline analysis for certain roadways.

The progress of the Memorandum of Agreement was discussed and will be reviewed by EPA to determine if there are any changes or additions that need to be made. Once the final changes are made to the document it will be circulated for legal review by the signatory agency.

Sam Longmire reported that NSAQMD is currently working with ARB to develop the State Implementation/Attainment Plan. He indicated that they anticipate having public workshops in late 2006 and the plan completed in early 2007.

Conformity Working Group: Western Nevada County Non-attainment Area	<b>MEETING AGENDA</b>
	<b>Date:</b> Monday, March 20th, 2006 <b>Time:</b> 2:30 p.m. to 4:00 p.m. <b>Location:</b> Caltrans Venture Oaks Building, 2389 Gateway Oaks Blvd., Sacramento, CA 95833
<b>Meeting called by:</b>	Mike Woodman, Nevada County Transportation Commission (NCTC)
<b>Facilitator:</b>	Mike Woodman, NCTC
<b>Recorder:</b>	Mike Woodman, NCTC
<b>Invitees:</b>	NSAQMD, FHWA, FTA, EPA, ARB, and Caltrans
<b>Purpose of Meeting:</b>	Interagency Consultation on Air Quality Conformity Issues
<b>Decisions to be Made:</b>	See Agenda below
<b>Method of Decision Making:</b>	Consensus of conformity working group
<b>Material to be reviewed in advance of meeting</b>	Agenda, NCTC Model/EPA Boundary, Revised Regionally Significant List, Project Descriptions for the County of Nevada's Highway Bridge Replacement and Rehabilitation Program (HBRRP), and 40 CFR Sec. 93.126 "Table 2" and 40 CFR Sec. 93.127 "Table 3" Exempt Project Descriptions.

#	Time	Topic	Presenter	Desired Outcome
1	2:30	Introductions	Mike Woodman	
2	2:35	Opening (Purpose of Meeting)	Mike Woodman	
3	2:40	Agenda Review	Mike Woodman	Is there anything that needs to be added, deleted, or changed?
4	2:45	Discussion Items – 1) Status of Dorsey Drive Interchange Conformity Process. 2) Confirm revised model analysis years 3) Review and confirm the revised "Regionally Significant Project List" 4) Review the difference between the coverage area of the NCTC traffic model and the Non-Attainment Boundary 5) Review of Nevada County's Federally Funded Highway Bridge Rehabilitation and Replacement Program projects in relation to air quality conformity 6) Discuss status of the MOA for Interagency Consultation Procedures 7) Summarize changes & decisions	Mike Woodman & Working Group	1) Inform of the group of the current status and timeline for future activities 2) Confirm the revised model analysis years 3) Confirm the revised "Regionally Significant List" 4) Make a decision on how the boundary and model coverage should be addressed. 5) Determine if projects are exempt under the "Table 2" classifications or if other action is necessary regarding conformity 6) Inform the group of the current status and discuss the actions necessary to complete the MOA 7) Review and confirm the actions and decisions made by the group
6	4:00	ADJOURN		Thank you for your participation.

March 20<sup>th</sup>

## Western Nevada County Conformity Working Group Meeting

Participants: Marlo Tinney (Caltrans District 3), Ann Marie Robison (Caltrans District 3), Susan Wilson (Caltrans District 3), Steve Luxemberg (FHWA), Wade Hobbs (FHWA), Sam Longmire (NSAQMD), Nick Deal (Caltrans District 3), Mike Brady (Caltrans HQ), Dennis Wade (ARB), John Kelly (EPA Region 9), Ted Mately (FTA), and Mike Woodman (NCTC).

Mike Woodman reviewed the status of the Dorsey Drive Interchange conformity process. The Nevada County Transportation Commission (NCTC) will be providing the necessary traffic model outputs to Caltrans in early April. It was mentioned that it will be very important to document the projects and their associated analysis years included in the modeling. Once Caltrans receives the traffic model outputs they will begin the emissions analysis and then work with NCTC staff to prepare the Conformity Analysis. The goal is to have a Conformity Determination by July of 2006. Mike Brady mentioned to keep in mind that there will have to be a public review process of the analysis and to incorporate it into the schedule.

The group was reminded that at the last conformity working group meeting, the group had approved 2008, 2018, and 2028 as the years for the regional emissions analysis. Mike Woodman stated that the final analysis year should actually be 2027, which is consistent with the last year of the Nevada County Transportation Commission's Regional Transportation Plan and also their currently adopted traffic model. The group agreed that the revised analysis years will be 2008, 2018, and 2027.

The working group reviewed the revised "Regional Project List" (attached) generated from the 2005 Nevada County Regional Transportation Plan and confirmed the non exempt projects, the 40 CFR 93.126 and 93.127 "Table 2" and "Table 3" exempt projects, and exclusion of projects for which project details and funding were unknown. It was agreed that the SR 20/Colfax Ave./Neal St./S. Auburn St. ramps project and the SR 20-49 Golden Center Freeway Collector Distributor project should not be included in the regional emissions analysis at this time. These projects will be included in future regional emissions analysis once project details and funding are identified. The group stated that the project description for McKnight Way widening project from Taylorville Rd. to Freeman Ln. should be revised to make the improvement clear.

The discrepancy between the coverage area of the NCTC traffic model and the Non-Attainment Boundary was reviewed by the working group. It was pointed out that the graphic provided in the agenda packet did not accurately depict the eastern non attainment boundary and should actually be aligned one section line to the west. The group determined that an offline analysis should be conducted for the portions of SR 20 and I-80 within the attainment area not covered by the NCTC traffic model. The group also recommended that NCTC staff verify if Bowman Road is included in the traffic model network and if not an offline analysis would need to be done for this roadway as well. This analysis should include both light duty and heavy duty vehicles and document the methodology utilized.

The County of Nevada's list of projects funded with Highway Bridge Rehabilitation and Replacement Program (HBRRP) projects were reviewed to determine if the projects are exempt under 40 CFR 93.126 as bridge rehabilitation or replacement projects or if other action regarding conformity is necessary. The working group determined that following HBRRP project located in the western Nevada County non-attainment area is exempt per 40 CFR 93.126:

- ◆ Purdon Road at the Yuba River Bridge (bridge painting)

The other bridge project with HBRRP funding that was reviewed by the group was the Valley Drive at Squirrel Creek bridge replacement project. The County proposes to replace an existing 20 foot long one lane structure on Valley Drive at Squirrel Creek with a two-lane 40 foot crossing. The roadway approaches will remain two lanes and the project will not increase traffic and is not located on a regionally significant roadway. The intent of the project is to alleviate roadway flooding, enhance roadway safety, and allow for emergency vehicle passage.

After discussing the scope of the Valley Drive at Squirrel Creek bridge project the group determined, in relation to conformity per 40 CFR 93.122 (g)(2), that in the absence of a conforming TIP and Plan this project is not a regionally significant project and does not impede the progress of any other projects envisioned in the transportation system in the horizon of the Statewide Transportation Plan and satisfies the requirements of Section 93.118 or Section 93.119 and an additional regional emissions analysis is not warranted. Mike Woodman agreed to draft a letter the Nevada County Department of Transportation to inform them of the conformity decisions made in relation to the subject HBRRP projects.

Mike Woodman stated that due to the passage of the new federal reauthorization bill, SAFETEA-LU, he will need to make some modifications to the Draft Interagency Consultation Memorandum of Agreement (MOA). The working group members felt it would be best to wait for the MOA from Caltrans District 10 to be completed and reviewed prior to making any changes at this point.

**REGIONAL EMISSIONS  
ANALYSIS METHODOLOGY**

**For the Western Nevada County 8-  
Hour Ozone Non-Attainment Area**

Prepared by the  
Nevada County Transportation Commission

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## 1. BACKGROUND

This report presents the Air Quality Conformity Analysis procedures conducted for the Dorsey Drive Interchange project located at approximately KP R21.9 (PM R13.6) adjacent to SR 20/49 within the City of Grass Valley. It also provides an overview of the conformity process in relation to the Squirrel Creek Bridge Project. The Dorsey Drive Interchange project and Squirrel Creek Bridge project are the first transportation projects in the Western Nevada County 8 Hour Ozone Non-Attainment area to require conformity determinations. The area has been determined to be isolated rural and has population centers of less than 50,000. The Environmental Protection Agency designated western Nevada County non-attainment as Subpart 1 (basic) in recognition of the fact the ozone violations result from ozone transported from the Sacramento and Bay Area.

Due to its isolated rural status, it is therefore exempt from the Federal Highway Administration/Federal Transportation Administration (FHWA/FTA) metropolitan planning requirements related to the development of transportation plans and Transportation Improvement Programs (TIPs), and where projects are not a part of the emissions analysis of any Metropolitan Planning Organizations (MPOs) metropolitan transportation plan or TIP. Transportation projects for the area must be included in a statewide transportation plan and Statewide Transportation Improvement Program (STIP) prior to Federal action to fund or approve such projects.

The ozone precursors expected to be generated due to the 8-hour ozone non-attainment status include the following pollutants: reactive organic gases (ROG) and nitrogen oxides (NO<sub>x</sub>). The area is attainment/unclassified for carbon monoxide (CO), particulate matter of ten (10) microns or smaller (PM<sub>10</sub>) and particulate matter of 2.5 microns or smaller (PM<sub>2.5</sub>); therefore, the project does not cause or contribute to any new localized PM or CO violations nor contribute to eliminating or reducing the severity and number of localized CO violations. Table "A" is part of a section that shows for each pollutant and precursor whether the interim emissions tests and/or the budget test applies for conformity.

A regional emissions analysis that includes all regionally significant projects in the non-attainment area was undertaken per scenario year to demonstrate the compliance with conformity requirements for all projects included in the planning horizon for western Nevada County. This is for the scenario years 2008, 2018 and 2027. All regionally significant projects, according to their opening dates for traffic regardless of funding source, are modeled in each scenario. Each project is identified by analysis year in relation to when it is anticipated be open to traffic. In addition, vehicle miles of travel (VMT) for non-regionally significant Federal projects are also accounted for in the regional emissions analysis. The regional emissions analysis complies with all applicable conformity requirements; however, since there is not an air quality implementation plan developed yet, transportation control measures (TCMs), non-regulatory measures or court orders relating to this project, the associated requirements are not applicable and an interim emissions test is utilized.

**TABLE "A"**  
**Conformity Test Utilized by Pollutant and Precursor**

	Interim Emissions Test Applies	Budget Test Applies
Pollutant: Ozone	X	
Precursor: Nitrogen Oxides (NOx)	X	
Precursor: Reactive Organic Gases (ROG)	X	

The Western Nevada County 8-Hour Ozone Non-Attainment Area, as an isolated rural non-attainment area for marginal and below, is not subject to the reasonable further progress requirements of CAA section 182(b)(1). Ozone and the ozone precursors are subject to analysis per VMT. The action/baseline interim emissions test results pass the conformity test for the Dorsey Drive Interchange Project.

## 2. CONFORMITY RULE CRITERIA TO BE FULFILLED

There will be a number of Conformity Rule criteria that will be required to be fulfilled. The following is an excerpt from 40 CFR 93.109, Table 1, from which the relevant criteria is presented here for acknowledgement that the criteria do apply to the Western Nevada County 8-Hour Ozone Non-Attainment Area.

### 40CFR 93.109, From Table 1 –Conformity Criteria That Will Apply

All actions at all times:

- 93.109 Latest Planning Assumptions (applicable)
- 93.110.1 Latest Emissions Model (applicable)
- 93.110.2 Consultation (applicable)

Project (not from a conforming plan and TIP):

- 93.113(d) TCMs (not applicable for this Conformity Analysis if emissions do not exceed interim emissions test criteria)
- 93.119 Criteria and procedures: Interim emissions in areas without motor vehicle emissions and budgets (applicable)

## 3. REGIONAL EMISSIONS ANALYSIS

The Dorsey Drive Interchange Project and the Squirrel Creek Bridge Project are the first projects in the Western Nevada County 8-Hour Ozone Non-Attainment Area that is currently subject to conformity.

A regional emissions analysis was conducted for analysis years 2008, 2018, and 2027 for the pollutant ozone and the precursors ROG and NOx. All analyses were conducted using the latest planning assumptions and emissions models. For the action/baseline test, the Dorsey Drive Interchange project is assumed in the 2018 and 2027 test scenarios. Based on the planned phased construction of the Dorsey Drive Interchange, the 2018 test scenario assumes that only the southbound onramp to SR 20/49 is constructed and open to traffic. The 2027 test scenario assumes

the entire Dorsey Drive interchange will be constructed and open to traffic. The major conclusions of the Dorsey Drive Interchange Regional Emissions Analysis are:

For ozone, the total ROG and NO<sub>x</sub> associated with implementation of the project for all years tested, passed the action/baseline test where the emissions in the action scenario were no greater than the baseline scenario. See the *Western Nevada County 8-Hour Ozone Regional Emissions Analysis for the Dorsey Drive Interchange and Squirrel Creek Bridge Project* for details.

After reviewing the scope and location of the Squirrel Creek Bridge Project at Drive Valley, the Western Nevada County Conformity Working Group made the determination that the project is not located on a regionally significant roadway and therefore per 40 CFR 122(a)(1) this project is not required to be explicitly modeled and the vehicle miles traveled (VMT) from the project have been estimated in accordance with reasonable professional practice. Per 40 CFR 93.119(g)(2), the transportation projects and planning assumptions in the "Action" and "Baseline" scenarios are exactly the same for all possible analysis years, and consequently, the emissions predicted in the "Action" scenario are not greater than the emissions predicted in the "Baseline" scenario for such analysis years. Therefore, this project satisfies the conformity rule requirements without additional regional emissions analysis. Specific project information is included in the *Western Nevada County 8-Hour Ozone Regional Emissions Analysis for the Dorsey Drive Interchange and Squirrel Creek Bridge Project*.

#### 4. MOBILE SOURCE EMISSIONS ESTIMATION

Mobile source emissions estimates prepared for the Dorsey Drive Interchange Conformity Analysis generally involved three (3) tasks:

1. Developing data describing travel activity (e.g., the number of vehicle trips and number of VMT);
2. Generating mobile source emission rates which quantify emissions generated by travel activity (e.g., emissions per trip or emissions per VMT); and
3. Multiplying the amount of travel activity by the mobile source emission rates.

The descriptions of travel activity data that will be used in this analysis will come from the Nevada County Transportation Commission's regional travel demand model for western Nevada County as well as offline analysis. The mobile source emission rates and the multiplication of travel activity data by mobile source emission rates will be performed by application of the EMFAC 2002 emissions model.

The following section of this report present a detailed description of the assumptions and approaches applied in the Nevada County Transportation Commission travel demand model/EMFAC 2002 analysis process.

#### 5. DATA SOURCES

Estimates of vehicle activity (e.g., the number of vehicle trips and VMT that are used in this conformity assessment are from the regional travel demand model maintained by PRISM Engineering and the EMFAC 2002 emissions modeling conducted by Caltrans. The EMFAC 2002 model outputs are analyzed to ensure that the emissions of the "action" scenario are not greater than the emissions predicted in the "baseline" scenario, for the analysis years associated with Dorsey

Drive Interchange project.

## 6. INTERAGENCY CONSULTATION AND COOPERATION

Consultation is generally conducted through the Western Nevada County Conformity Working Group. The Western Nevada County Conformity Working Group has been established by the Nevada County Transportation Commission to provide a coordinated approach to the western Nevada County air quality, conformity, and transportation related issues. The Working Group's goal is to ensure coordination, communication and compliance with Federal and State Clean Air Act requirements. The Western Nevada County Conformity Working Group meets as often as needed, but not less frequently than semi-annually unless there is consensus among the members to meet less frequently, but not less than annually.

An interagency coordination process outlining the responsibilities of the multiple agencies involved was developed to ensure the coordination of transportation planning and air quality conformity efforts and compliance with Federal and State Clean Air Act requirements. The interagency consultation meeting held on June 16, 2005 marked the beginning of the development of the Dorsey Driver Interchange Conformity Analysis. On March 20, 2006, the Western Nevada County Conformity Working Group met and approved the use of the interim emissions test, analyses years, NCTC model assumptions, listed regionally significant projects, projects exempt under 40 CFR 93.126 and 93.127, and the general emissions modeling methodology.

*Western Nevada County 8-Hour Ozone Regional Emissions Analysis for the Dorsey Drive Interchange and Squirrel Creek Bridge Projects* was distributed to the Western Nevada County Conformity Working Group in July 2006 for review. Comments received from the Working Group will be addressed and included in the Final Report. The draft conformity analysis is also posted on the NCTC website <http://www.nctc.ca.gov>.

The ARB provided guidance on the operation of the EMFAC 2002 software. Travel activity data extracted from the regional travel demand model was provided by the NCTC, and Caltrans District 3 staff provided assistance in developing the additional travel activity data requiring an offline analysis. The financially constrained regionally significant federal and non-federal projects reviewed by the Nevada County Conformity Working Group were included in the relative analysis years. A review of the technical analysis approaches applied in the preparation of the Conformity Analysis will be provided by FHWA, FTA, EPA, ARB, and the Northern Sierra Air Quality Management District (NSAQMD) and comments addressed and included in the final Conformity Analysis presented to FHWA and FTA for a Conformity Determination.

## 7. SCENARIOS TESTED FOR CONFORMITY

Each "Action" and "Baseline" scenario is represented for the analysis years 2008, 2018, and 2027.

Each future model year scenario includes a highway network that reflects how the roadway system in the non-attainment area is expected for each future year, including all regionally significant projects that are anticipated to be open to the public. Similarly, each model year scenario represents progressively greater land use development, including the roadway networks expected to occur in 2008, 2018 and 2027.

The action scenario must be equal or less than the baseline scenario for each scenario year applicable to the Dorsey Drive Interchange project. The first analysis period will be 2008 and does not include the Dorsey Drive Interchange project. Given the plans for staged construction of the Dorsey Drive Interchange, phase I (single southbound onramp) is included in the 2018 scenario and phase II (full interchange) of the project is included in the 2027 scenario.

## 8. INPUT VALUES

EMFAC 2002 is the latest emissions model approved by EPA. It uses the latest planning assumptions that are less than five (5) years old. Applying the EMFAC 2002 program requires data describing area-wide travel activity, and data describing how this activity is stratified in several ways. For this project, data describing vehicle activity is divided into:

- Each of the three (3) analysis years
- Twenty four (24) hour period of the day
- Thirteen (13) types of vehicles
- Fifteen (15) vehicle speed categories

The following is a description of specific EMFAC 2002 input values:

### A. Vehicle Trips

EMFAC 2002 contains information on the number of vehicle trips projected to occur under each scenario in the study area based on the total vehicle population. The estimates of vehicle trips under each scenario for western Nevada County are provided in the EMFAC 2002 output tables.

### B. Vehicle Miles Traveled

EMFAC 2002 requires information on VMT projected to occur under each scenario for each county in the study area. VMT data will be developed by running the Viper/TP+ model for each analysis period 2008, 2018 and 2027. The VMT model results for western Nevada County along with additional offline VMT analysis will be input into EMFAC 2002.

Through interagency consultation it was determined that an offline analysis would be required for the following major roadways outside of the NCTC travel demand model coverage area, but still within the Western Nevada County Non-Attainment Area:

- ◆ Bowman Lake Road
- ◆ SR 20 from just east of Bowman Lake Road to the connection with Interstate 80
- ◆ Interstate 80 east of the connection with State Route 20 to just east of Lake Van Norden

To determine the offline vehicle miles traveled (VMT) for each specific segment of roadway, the number of miles of the roadway will be multiplied by the most recent traffic volumes and then growth factors based on historic trends will be utilized to determine the VMT for the analysis years 2008, 2018, 2027. Once the VMT is determined it will be added to the model output VMT by speed bin.

### C. Vehicle Miles Traveled: Distribution by Vehicle Speed

Estimates of VMT were stratified by the vehicle speed category outputs from the NCTC Viper/TP+ travel demand model for western Nevada County and the offline analysis conducted by Caltrans. It

was determined that there was not a significant difference between the peak and off-peak VMT by speed category due to the limited duration and amount of congestion in the non-attainment area. The VMT model outputs for the twenty-four hour period adequately address the off-peak and peak VMT by speed. The following are the fifteen (15) speed categories used by EMFAC 2002 are depicted in Table B on page 6.

**TABLE "B"**

<b>Summary of EMFAC Speed Categories</b>	
1. 0-5 mph	9. 40-45 mph
2. 5-10 mph	10. 45-50 mph
3. 10-15 mph	11. 50-55 mph
4. 15-20 mph	12. 55-60 mph
5. 20-25 mph	13. 60-65 mph
6. 25-30 mph	14. 65-70 mph
7. 30-35 mph	15. 70-75 mph
8. 35-40 mph	

#### **D. Vehicle Miles Traveled for Intrazonal Trips**

The Viper/TP+ travel demand model does account for intrazonal trips and the associated data was captured in the VMT model outputs by speed bin.

#### **E. Number of Vehicles**

The EMFAC 2002 program requires information describing the number and type of motor vehicles present in the study area. Information describing the number and type of vehicles in the study area is generated via the EMFAC 2002 model using motor vehicle data collected by the ARB.

#### **F. Distribution of Travel Activity by Vehicle Type**

The EMFAC 2002 program requires information describing the distribution of the VMT and speeds by vehicle type. Control totals for VMT and the number of vehicle trips will be from the NCTC travel demand model and offline modeling and EMFAC 2002, as described above. Control totals for the number of vehicles are contained in the default values of EMFAC 2002. The resulting stratification will be contained within the default values of the EMFAC 2002 program assumptions for the non-attainment area.

#### **G. Distribution by Engine Type**

The data files provided with the EMFAC 2002 program contain forecasts of vehicle fleet mix by vehicle type, whether the vehicles are equipped with catalytic converters and whether the vehicle is fueled by diesel fuel or gasoline. These distributions by vehicle engine type are used by EMFAC 2002. The documentation of procedures used to develop these distributions is presented in the ARB document "Methodology of Estimating Emissions from On-Road Motor Vehicles".

REFERENCES

EPA. 2004. 40 CFR Part 93. *Transportation Conformity Rule Amendments for the New 8-Hour Ozone and PM2.5 National Ambient Air Quality Standards and Miscellaneous Revisions for Existing Areas; Transportation Conformity Rule Amendments: Response to Court Decision and Additional Rule Changes; Final Rule*. U.S. Environmental Protection Agency. Federal Register, July 1, 2004, Vol. 69, No. 126, p. 40004.

EPA. 2004. 40 CFR Part 93. *Transportation Conformity Rule Amendments for the New 8-Hour Ozone and PM2.5 National Ambient Air Quality Standards and Miscellaneous Revisions for Existing Areas; Transportation Conformity Rule Amendments: Response to Court Decision and Additional Rule Changes; Correction to the Preamble*. U.S. Environmental Protection Agency. Federal Register, July 20, 2004, Vol. 69, No. 138, p. 43325.

EPA. 2004. *Companion Guidance for the July 1, 2004, Final Transportation Conformity Rule: Conformity Implementation in Multi-jurisdictional Non-attainment and Maintenance Areas for Existing and New Air Quality Standards*. U.S. Environmental Protection Agency. July 21, 2004.